Testboy®

GmbH, Germany

Stands For Quality

Since 1953

Multi-Tester

AC ◀L

390

V

BL Sensor

ON/OFF

LIGHT

RCD

Testboy® *Profi LCD Plus*

PROFESSIONAL MEASURING INSTRUMENTS AND TESTERS

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TESTBOY | CONTACT DETAILS

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TESTBOY | COMPANY PHILOSOPHY

| 1953 Establishment of Ludwig Mers as an electrical installation company

| 1960 Ludwig Mers GmbH & Co. KG Elektrotechnische Spezialfabrik

| 1993 Takeover of Ludwig Mers GmbH & Co. KG by the present Managing Director

| 1997 Establishment of the new company building

| 2000 Expansion of the warehouse in Vechta

| 2005 Change of the company name to Testboy GmbH

| 2005 Construction of an office and warehouse building in Vechta

| 2008 Expansion of the production facilities and warehouse in Vechta

The Testboy product range is **being continually revised** to meet **changing customer requirements**. Our instruments are matched automatically to the latest market requirements and the applicable standards and regulations. Our strategy is based on a combination of as many **functions as possible in one device.**

The names "Testboy", "Testavit" and "Schuki" have become trademarks for **robust and functional testers and measuring instruments**. State-of-the-art production technology, **TÜV / GS-tested and user-friendly products** combined with **a longer life** have made Testboy GmbH a **leading manufacturer**.

Quality and service is top priority at Testboy!

Your TESTBOY team

GENERAL INFORMATION | SAFETY INFORMATION

These days, measuring instruments and testers are essential tools when carrying out construction, repair and maintenance tasks involving electrical devices and installations.

Modern test instruments should help the user to perform safety checks, troubleshooting and function tests quickly, safely and reliably.

Internationally valid safety standards for the safety of electrical measuring and control equipment are drawn up and ratified by the IEC (International Electronical Commission). This guarantees that tests are carried out according to the same criteria and guidelines all over the world.

Measuring and test instruments are tested as follows:

CAT II   600 V | 4000 V   Peak surge voltage 12 Ohm source
CAT II   1000 V | 6000 V   Peak surge voltage 12 Ohm source
CAT III 600 V | 6000 V   Peak surge voltage 2 Ohm source
CAT III 1000 V | 8000V   Peak surge voltage 2 Ohm source
CAT IV   600 V | 8000 V   Peak surge voltage 2 Ohm source
CAT IV   1000 V | 12000V   Peak surge voltage 2 Ohm source

Measuring instruments are classed according to 3 different categories that indicate the ranges for which they are approved:

CAT II | Electrical circuits that are directly connected to the mains
              Socket outlets and long branch lines
              All socket outlets that are more than 10 m away from CAT III
              All socket outlets that are more than 20 m away from CAT IV

CAT III | In building installations, e.g. distribution boards, cabling, socket outlets
              Supply cables and short supply leads
              Distributor boards
              Socket outlets for large loads with short leads for supplying electrical energy
              Lighting systems for large buildings
              Supplies
              Busbars

CAT IV | At the source of the low voltage installation, e.g. electricity meters, main terminal,
              primary overcurrent protective devices
              In the open and supply cable feed
              Supply cables from the connection point to the building
              Connection between the measuring instrument and the connection point
              Overhead lines to individual buildings
              Underground cables to water pumps

In order to document that the products of a manufacturer comply with IEC/EN 61010-1, the manufacturer can have these products tested by an accredited test body to check if they conform to the requirements laid out in the standard. Once a test has been passed, the manufacturer is entitled to attach the corresponding quality certificate to its product.

As a safety conscious and responsible manufacturer, Testboy GmbH has its products certified by TÜV-SÜD Produkt Service GmbH.
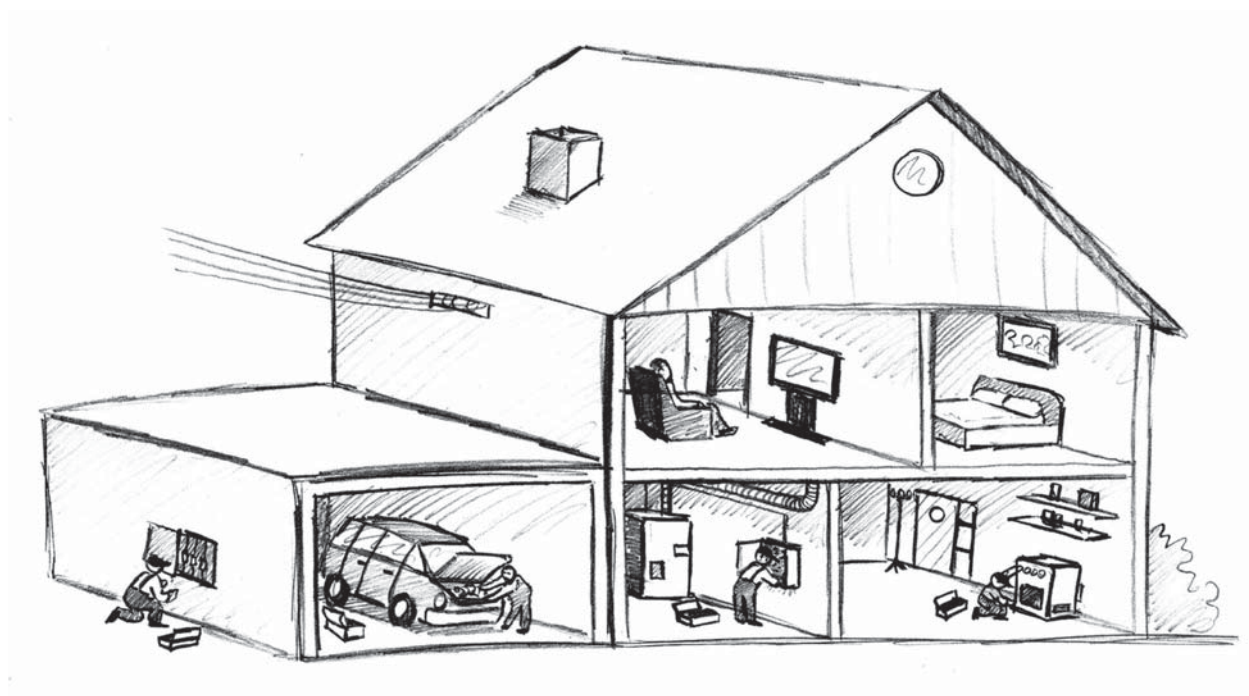
CAT IV   CAT III   CAT II

Measurement categories according to the IEC/EN 61010–1 standard.

OVERVIEW | VOLTAGE TESTER

Working with a voltage tester should be a matter of course for every professional in the electrical trade, simply because it belongs in the basic equipment of every electrician.

A voltage tester measures the magnitude (voltage) within a pre-determined range.

In accordance with IEC/EN 61010-1, all 1-pole voltage testers may be used in measuring circuits up to CAT III.

Specific safety requirements for 2-pole voltage testers are given in IEC/EN 61243-3, DIN VDE 0682 Part 401.

However, it means that all manufacturers are only allowed to produce and sell 2-pole voltage testers that comply with the safety requirements of IEC/EN 61243-3, DIN VDE 0682 Part 401.

Optical indication is via an LED or LCD display. Furthermore, some of our devices are still equipped with an acoustic indication (Testboy 11, Testboy 111, Testboy 113, Testboy Profi LED *Plus* and Testboy Profi LCD *Plus*).

APPLICATIONS

1. Testboy 110
2. Testboy Profi LCD *Plus*
3. Testboy Profi LED *Plus*
4. Testboy Profi LED *Plus*
5. Testboy 40 *Plus*
6. Testboy 113
7. Testboy Profi LCD *Plus*
8. Testboy 111

VOLTAGE TESTER | TESTBOY 10 | Non-contact voltage tester

The Testboy 10 is one of the most popular products in our range. With its ease of use and wide variety of application possibilities, it should definitely be part of the standard equipment of both DIY enthusiasts and professional electricians.

Its housing, made of impact-resistant and unbreakable ABS plastic, makes it suitable for use in tough environments.

The non-contact voltage tester can detect live conductors, e.g. cable splicing, cable drums, sockets, switches and junction boxes. A defective lamp in a chain of lights can be localised in just a few seconds. An invisible cable breakage in an extension lead can be identified to within a tolerance of just a few millimetres.

In contrast to the inductive measurement technique, the capacitive technique requires no current flow. Thus, interruptions can be indicated rapidly and precisely, to within a centimetre.

The Testboy 10 has been specifically manufactured for use in installation work. Since it is so easy to handle, it is particularly suitable for use in areas where accessibility is restricted.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 10
Indication	Optical
Measuring range	110-1000 V AC
Power supply	2× 1.5 V
Overvoltage category	CAT III 1000 V
Dimensions	142 × 26 mm
Weight	22 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03

| 1000 V AC | CAPACITIVE | V NON-CONTACT | 4 mm RESPONSE | OPTICAL | 5 YEAR WARRANTY |

VOLTAGE TESTER | TESTBOY 11, 111 | Non-contact voltage tester with warning signal

The Testboy 11 and the Testboy 111 are two of the most popular products in our range. With their ease of use and wide variety of application possibilities, they should definitely be part of the standard equipment of both DIY enthusiasts and professional electricians.

Both voltage testers have optical and acoustic voltage indication. Its housing, made of impact-resistant and unbreakable ABS plastic, makes it suitable for use in tough environments. In the Testboy 111, an integrated LED torch light enables defective cables to be located quickly and reliably.

The non-contact voltage testers can detect live conductors, e.g. cable splicing, cable drums, sockets, switches and junction boxes. A defective lamp in a chain of lights can be localised in just a few seconds. An invisible cable breakage in an extension lead can be indicated to within a tolerance of just a few millimetres.

In contrast to the inductive measurement technique, the capacitive technique requires no current flow. Thus, interruptions can be indicated rapidly and precisely, to within a centimetre.

The Testboy 11 and the Testboy 111 have been manufactured especially for the use in installation work. Since they are so easy to handle, they are particularly suitable for use in areas where accessibility is restricted.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 11	Testboy 111
Indication	Optic and acoustic	Optic and acoustic
Measuring range	110 -1000 V AC	110 -1000 V AC
Power supply	2× 1.5 V	2× 1.5 V
Overvoltage category	CAT III 1000 V	CAT III 1000 V
Dimensions	142 × 26 mm	160 × 25 mm
Weight	22 g	45 g
Integrated LED torch light	No	Yes
Colour	Red, other colours on request	Red, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03	1× operating instructions 2× AAA (micro) batteries, (L)R03

LED | 1000 V AC | CAPACITIVE | V NON-CONTACT | 4 mm RESPONSE | OPTICAL | ACOUSTIC | 5 YEAR WARRANTY

VOLTAGE TESTER | TESTBOY 110 | Non-contact voltage tester from 12 V ~

The Testboy 110 is an advancement on the proven Testboy 100. With its ease of use and wide variety of application possibilities, it should definitely be part of the standard equipment of both DIY enthusiasts and professional electricians.

Its housing, made of impact-resistant and unbreakable ABS plastic, makes it suitable for use in tough environments. An integrated LED torch enables defective cables to be located quickly and reliably.

The non-contact Testboy voltage testers can detect live conductors, e.g. cable splicing, cable drums, sockets, switches, junction boxes, fuses, relays, installations and LV systems.
A defective lamp in a chain of lights can be localised in just a few seconds. An invisible cable breakage in an extension lead can be indicated to within a tolerance of just a few millimetres.

In contrast to the inductive measurement technique, the capacitive technique requires no current flow. Thus, interruptions can be indicated rapidly and precisely, to within a centimetre.

The Testboy 110 has been specifically developed for use in installation work. Since it is so easy to handle, it is particularly suitable for use in areas where accessibility is restricted.

The integrated LED torch serves as a source of light, and also for switching between the two measuring ranges (from 12 / 110 V AC).

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 110
Indication	Optical
Measuring range	12-1000 V AC
Power supply	2× 1.5 V
Overvoltage category	CAT III 1000 V
Dimensions	160 × 25 mm
Weight	45 g
Integrated LED torch light	Yes
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03

| LED | 12 –1000V AC | CAPACITIVE | V NON-CONTACT | 4 mm RESPONSE | OPTICAL | 5 YEAR WARRANTY |

VOLTAGE TESTER | TESTBOY 113 | Non-contact voltage tester from 12 V ~

The Testboy 113 is an advancement on the proven Testboy 110. With its ease of use and wide variety of application possibilities, it should definitely be part of the standard equipment of both DIY enthusiasts and professional electricians.

The Testboy 113 has both optical and acoustic indication. Its housing, made of impact-resistant and unbreakable ABS plastic, makes it suitable for use in tough environments. An integrated LED torch enables defective cables to be located quickly and reliably.

The non-contact Testboy voltage testers can detect live conductors, e.g. cable splicing, cable drums, sockets, switches, junction boxes, fuses, relays, installations and LV systems.
A defective lamp in a chain of lights can be localised in just a few seconds. An invisible cable breakage in an extension lead can be indicated to within a tolerance of just a few millimetres.

In contrast to the inductive measurement technique, the capacitive technique requires no current flow. Thus, interruptions can be indicated rapidly and precisely, to within a centimetre.

The Testboy 113 has been specifically developed for use in installation work. Since it is so easy to handle, it is particularly suitable for use in areas where accessibility is restricted.
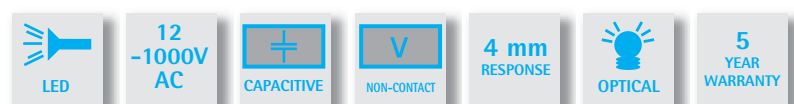
The integrated LED torch serves as a source of light, and also for switching between the two measuring ranges (from 12 / 110 V AC).

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 113
Indication	Optic and acoustic
Measuring range	12 – 1000 V AC
Power supply	2× 1.5 V
Overvoltage category	CAT III 1000 V
Dimensions	160 × 25 mm
Weight	45 g
Integrated LED torch light	Yes
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03

LED | 12 –1000V AC | CAPACITIVE | V NON-CONTACT | OPTICAL | ACOUSTIC | 5 YEAR WARRANTY

VOLTAGE TESTER | TESTBOY 114 | Non-contact voltage tester from 12 V ~

With its optical and vibrating indication, the Testboy 114 is the latest advancement in Testboy non-contact voltage testers.

Its ease of use and wide variety of application possibilities make it indispensable, both for DIY enthusiasts and for professional electricians. For example, an invisible cable breakage in an extension lead can be indicated to within a tolerance of just a few millimetres. Within just a few seconds, a defective lamp in a chain of lights can be localised and live conductors, e.g. cable splicing, cable drums, sockets, switches, junction boxes, fuses, relays, installations and LV systems can be detected.

Its housing is made of impact-resistant and unbreakable ABS plastic, making it suitable for use in tough environments. The integrated LED torch serves as a source of light, and is also used for switching between the two measuring ranges (from 12 / 110 V AC).

The Testboy 114 uses the capacitive measurement technique. In contrast to the inductive measurement technique, no current flow is required.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 114
Indication	Optic and vibration
Measuring range	12 – 1000 V AC
Power supply	2× 1.5 V
Protection class	IP40
Overvoltage category	CAT III 1000 V
Dimensions	160 × 25 mm
Weight	45 g
Integrated LED torch light	Yes
Colour	Red, other colours on request
Scope of delivery	1× operating instructions
	2× AAA (micro) batteries, (L)R03

LED | 12 –1000V AC | CAPACITIVE | V NON-CONTACT | 4 mm RESPONSE | VIBRATION | OPTICAL | 5 YEAR WARRANTY

VOLTAGE TESTER | TESTBOY 40 *PLUS* | Double-pole voltage tester

Our Testboy 40 *Plus* combines two practical functions in a single device. DC and AC voltages are reliably indicated in the range from 6 to 400 V. Furthermore, the electronics enable phase search to the protective earth.

The user-friendly design of the Testboy 40 *Plus* makes it a joy to work with. The robust housing guarantees a long operational life and has already met with the approval of many customers working in the challenging electrical and tools trades.

The professional appearance is underlined by the mix of materials used in the high-quality plastic housing and the rubber handle.

DC and AC voltage tests with polarity indication can be performed safely.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61243-3 (DIN VDE 0682-401)

SPECIFICATIONS

Technical data	Testboy 40 *Plus*
Indication	Optical, 8 LEDs
Measuring range	6 – 400 V AC/DC
Power supply	Via measurement object
Dimensions	120 × 60 × 30 mm
Overvoltage category	CAT III 400 V
Weight	100 g
Colour	Red / black, other colours on request
Scope of delivery	1× operating instructions
Accessories (optional)	Carrying case

6–400 V AC/DC

5 YEAR WARRANTY

VOLTAGE TESTER | TESTBOY PROFI LED *PLUS* | Double-pole voltage tester

Due to its wide performance spectrum, the Testboy Profi LED *Plus* is one of the most popular products in our range. The Testboy Profi LED *Plus* combines the following 7 functions in a single device:

| Indication of DC and AC voltages from 6 V to 1000 V
| Single-pole phase testing
| Double-pole phase sequence testing
| Continuity testing up to 500 kOhm (acoustically / optically)
| Fuse / RCD test using two buttons
| LED torch light (white)
| Removable 4 mm test tips adapter

The professional appearance is underlined by the high-quality mix of materials between the watertight housing and the rubber handle. The display area is protected by an unbreakable plastic panel.

Even when in daily use, the robust construction, as well as the dustproof and watertight housing, guarantees a long service life. The test tips are protected by a removable cap, which is secured to the device. Using LEDs for all optical indications also guarantees maximum reliability.
From an AC/DC voltage of 35 V, an acoustic signal sounds to indicate life-threatening voltage.
The switchable load per button enables the RCD switch to be tripped intentionally so that the protective earth can also be measured. During continuity testing from 0 to 500 kOhm, an acoustic signal is output.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61243-3 (DIN VDE 0682-401)

SPECIFICATIONS

Technical data	Testboy Profi LED *Plus*
Indication	Optical, 13 LEDs
Operating panel	Finger tip / RCD button
Measuring ranges	Auto-ranging
Voltage range	6 – 1000 V AC/DC, 0 – 400 Hz
Continuity testing	0 – 500 kΩ with acoustic signal
Phase indication	>100 V AC
Switchable load	Is ~ 30 mA ED(DT) = 30 sec.
Power supply	2× 1.5 V
Overvoltage category	CAT IV 1000 V
Dimensions	238 × 70 × 30 mm
Protection class	IP65
Weight	200 g
Colour	Red / black, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03
Accessories (optional)	Carrying case

RCD | LED | 6-1000V AC/DC | ROTATING FIELD | OPTICAL | ACOUSTIC | 5 YEAR WARRANTY

VOLTAGE TESTER | TESTBOY PROFI LCD *PLUS* | Double-pole voltage tester

Due to its wide performance spectrum, the Testboy Profi LCD *Plus* is one of the most popular products in our range. The Testboy Profi LCD *Plus* combines the following 12 functions in a single device:

| Indication of DC and AC voltages from 6 V to 1000 V
| Single-pole phase testing
| Double-pole phase sequence testing
| Continuity testing up to 150 Ohm (acoustically)
| Resistance testing up to 2000 Ohm
| Adjustable distance CEE / Schuko safety plug
| Data hold function (during resistance testing)
| Display backlight
| Fuse / RCD test using two buttons
| LED torch light (white)
| Removable 4 mm test tips adapter
| Auto power-off

An auto power-off facility prevents batteries from discharging too quickly. A special professional feature is the LC display, which enables the indication of the phase and rotating field for all service or installation engineers. From an AC/DC voltage of 35 V, an acoustic signal sounds to indicate life-threatening voltage.
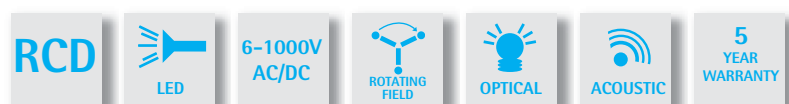The switchable load per button enables the RCD switch to be tripped intentionally so that the protective earth can also be measured. Even when in daily use, the robust construction, as well as the dustproof and watertight housing, guarantees a long service life. The test tips are protected by a removable cap, which is secured to the device.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61243-3 (DIN VDE 0682-401)

SPECIFICATIONS

Technical data	Testboy Profi LCD *Plus*
Indication	Optical, 3½ digit, LCD
Operating panel	Finger tip, RCD buttons, ON / OFF button, D-H button
Measuring ranges	Auto-ranging
Voltage range	6 – 1000 V AC/DC, 0 – 400 Hz
Resistance testing	0 – 2000 Ω
Continuity testing	0 – 150 Ω with acoustic signal
Phase indication	>100 V AC
Switchable load	Is ~ 30 mA ED(DT) = 30 sec.
Power supply	2× 1.5 V
Overvoltage category	CAT IV 1000 V
Dimensions	238 × 70 × 30 mm
Protection class	IP65
Weight	200 g
Colour	Red / black, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03
Accessories (optional)	Carrying case

LED | 6–1000V AC/DC | ROTATING FIELD | OPTICAL | ACOUSTIC | Ω RESISTANCE | 5 YEAR WARRANTY | RCD

OVERVIEW | CONTINUITY TESTER

Testboy continuity testers are the most popular on the German market.
For decades, the Testboy 2 has been a perennial favourite that everyone is familiar with.

The advancement of this classic has produced the Testboy 20 *Plus*, which has excellent features and is set to exceed the success of the tried and tested Testboy 2.

The continuity tester is an essential tool for any electrician, as it is suitable for the wide range of electrical function tests.

Various response thresholds and audible resistance differentials make continuity testing easier for users.
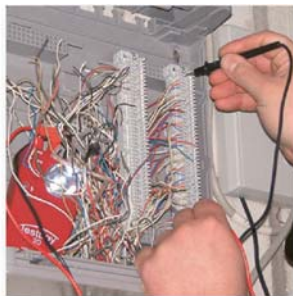
APPLICATIONS

1. – 3. Testboy 20 *Plus*

CONTINUITY TESTER | TESTBOY 20 *PLUS* | Continuity tester with external voltage protection

The Testboy 20 *Plus* is a further development of the Testboy 2, which is the most-sold continuity tester in Germany. Millions of satisfied customers are proof of the reliability of this instrument.

The non-contact voltage sensor detects AC voltages through the insulation. The capacitive measurement technique does not require any current flow. Faulty lamps in chains of Christmas lights or cable breaks are indicated accurately within seconds. The electronics also enable a single-pole phase search.

As well as fulfilling the functions of a conventional cable and continuity tester, the Testboy 20 *Plus* is also equipped with a high-performance LED torch that will shine for up to 80 hours using the batteries supplied.

A glow lamp is triggered by the integrated current alarm to warn against touching dangerous live wires.

Identifying wire pairs through continuity testing is a standard task for the Testboy 20 *Plus*.

Due the ease with which it can be operated and its suitability for use in a wide range of applications, the Testboy 20 *Plus* is a must for any electrician or service engineer.

The indication of cable breaks or faulty lamps is quick and accurate using the instrument.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 20 *Plus*
Continuity testing	Optical 0 – 20 Ω Acoustic 0 – 250 Ω
Test voltage	4.5 V
Test current	Optical ~10 mA Acoustic ~2 mA
Power supply	3× 1.5 V
External voltage protection	Up to 300 V
Dimensions	120 × 60 × 30 mm
Overvoltage category	CAT II 300 V
Weight	90 g (excl. battery)
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 2× test leads
Accessories (optional)	Crocodile clip Carrying case

LED | External volt-age protection | NON-CONTACT | ACOUSTIC | OPTICAL | 5 YEAR WARRANTY

OVERVIEW | MAGNETIC FIELD TESTER

Magnetic field testers are particularly suitable for rapid and precise testing of electro-magnetic switches and valves. The test circuit used has revolutionised the test procedure in all pneumatic and hydraulic systems. A functional test can be performed during operation to avoid downtimes.
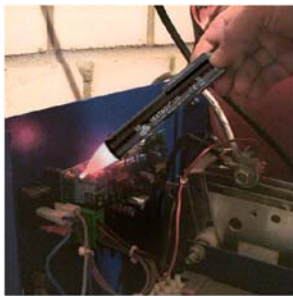
APPLICATIONS

1. Testboy 130
2. Testboy 15

MAGNETIC FIELD TESTER | TESTBOY 15, 130 | Non-contact magnetic field tester

The Testboy 15 and Testboy 130 are suitable for rapid and precise testing of electro-magnetic switches and valves. The method used for the measurement process has simplified the test procedure for all pneumatic and hydraulic systems significantly. Functional testing can be performed without any setting-up time or machine downtime.

A magnetic field is created when power is applied to an electro-magnetic switch, which the Testboy 15 and Testboy 130 are able to detect. The tip lights up to indicate the presence of permanent or synthetic magnetic fields. The tester is so sensitive that it is often not even necessary to remove covers or panelling.

Relays and magnetic coils, contactors, valves and pumps can be tested. In addition to numerous industrial applications, the testers are suitable for a wide variety of testing tasks in cars and commercial vehicles, as well as in heating and plumbing.
Both testers are equipped with a permanent magnet for self-testing.

The Testboy 130 is equipped with an energy-saving high-performance LED torch that provides a very bright white light. With the batteries supplied, the Testboy 130 torch achieves a burn time of approx. 80 hours.

The compact design means the testers can be carried in a shirt pocket for spontaneous use.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 15	Testboy 130
Indication	Optical, LED	Optical, LED
Measuring ranges	All magnetic fields	All magnetic fields
Power supply	2× 1.5 V	2× 1.5 V
Dimensions	142 × 26 mm	160 × 25 mm
Weight	22 g	45 g
Integrated LED torch light	No	Yes
Colour	Black, other colours on request	Black, other colours on request
Scope of delivery	1× operating instructions 2× AAA (micro) batteries, (L)R03	1× operating instructions 2× AAA (micro) batteries, (L)R03

LED   INDUCTIVE   NON-CONTACT   4 mm RESPONSE   OPTICAL   5 YEAR WARRANTY

OVERVIEW | MULTIMETER

Testboy digital multimeters are equipped with a wide variety of functions that simplify daily work routines.

Digital or analogue
Multimeters are equipped with a digital display in order to achieve a high-resolution display. An analogue display is imprecise because the displayed values between the scale intervals have to be estimated. The digital display on the other hand always displays the complete measurement value.

Voltage
The principal power supply for electronic devices is 230 V AC voltage, which is then converted in so-called mains adapters to a suitable operating voltage for electronic components (e.g. computer power supply units, pluggable power packs, etc.). Multimeters are required for directly measuring and displaying these voltages. The task is simplified even more if the measuring instrument is equipped with an auto-ranging function.

Continuity test
In order to be able to test for a good conductive low-resistance connection, all multimeters are designed with a continuity test and acoustic signal. The test voltage for the continuity test is so low that only low-resistance connections are ever recognised as continuity, but not transistor or diode lines.

Accuracy
The maximum measuring error is determined by the accuracy of the multimeter. This value is expressed as a percentage in relation to the actual measurement value.

Data hold
Pressing "Hold" or "DATA H" holds the measurement value currently displayed. This can be very handy if the value needs to be documented or the display cannot be read during the measurement.

Extract from the EK 1 resolution
According to section 14.1 of the standard DIN EN 61010-1, components where safety is an issue must be used in compliance with their ratings. A number of (digital) multimeters on the market have an in-built fuse, which is only permissible for 250 V. The measuring ranges specified on the multimeter for voltage testing are very often maximum 600 V or 1000 V, and even with the usual domestic phase-phase voltage of 400 V, the fuse rating is already exceeded. In the event of power surges and based on the fuses used, where creepage distances and clearances are too short, dangerous arcs occur, which pose a fire hazard and a risk to the health and safety of the user.

APPLICATIONS

1. Testboy Pocket
2. Testboy 3000
3. Testboy 2200
4. Testboy 3000
5. Testboy Pocket
6. Testboy 2200

MULTIMETER | TESTBOY 2200 | Digital multimeter with voltage sensor and LED torch

The versatile type 2200 multimeter has all necessary functions of a modern multimeter. It is easy to operate and can be used universally in the areas of electrical installation, in service and industry.
The integrated LED torch and the in-built non-contact voltage sensor set the Testboy 2200 apart and increase user safety.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 2200	
DC voltage	200 mV 2, 20, 200, 400 V	±0.5 %, +3 digit ±0.8 %, +5 digit
AC voltage	2, 20 V 200, 400 V	±1.5 %, +5 digit ±1.5 %, +5 digit
DC current	200 µA, 2000 µA 4 A	±1.0 %, +3 digit ±1.2 %, +5 digit
AC current	200 µA, 2000 µA 4 A	±1.3 %, +5 digit ±1.5 %, +8 digit
Resistance	200 Ω 2 kΩ, 20 kΩ, 200 kΩ 2 MΩ 20 MΩ	±1.0 %, +5 digit ±1.0 %, +5 digit ±1.0 %, +5 digit ±1.8 %, +5 digit
Diode test	Test current 0.6 mA No-load voltage typ. 1.5 V	
Continuity test	Audible signal if resistance <50 Ω	
Non-contact voltage test	100 – 600 V AC	
Maximum input voltage	400 V AC/DC	
Input impedance	>7.5 MΩ, typ 10 MΩ (AC V & DC V)	
AC V bandwidth	50 to 400 Hz	
Auto power-off function	15 minutes	
Overvoltage protection	CAT II 400 V, CAT III 300 V	
Fuses	µA, mA range 0.2 A / 400 V flink 4 A range 4 A / 400 V flink	
Power supply	2× 1.5 V	
Operating temperature range	0 °C to +40 °C (32 °F to 104 °F)	
Storage temperature range	-10 °C to +50 °C (14 °F to 122 °F)	
LED torch	ø 5 mm white high-performance LED	
Dimensions	140 × 70 × 35 mm	
Weight	250 g incl. batteries	
Scope of delivery	1× operating instructions 1× test leads CAT III 1× carrying case 2× 1.5 V AAA batteries, (L)R03	

LED	400V AC/DC	ACOUSTIC	Ω RESISTANCE	CAPACITIVE	V NON-CONTACT	4 mm RESPONSE	CALIBRATION ON REQUEST	5 YEAR WARRANTY

MULTIMETER | TESTBOY 3000 | Digital multimeter with voltage sensor and LED torch

Modern design, state-of-the-art technology and an expanded range of functions, break-proof ABS housing plus easy handling means that it can be used universally in trade and industry, even under the toughest of conditions.
The integrated LED torch and the in-built non-contact voltage sensor set the Testboy 3000 apart and increase user safety.
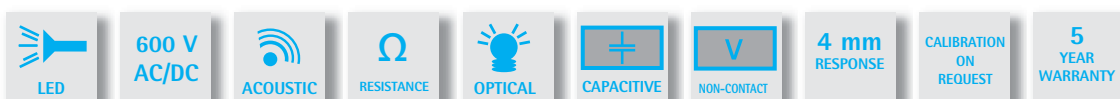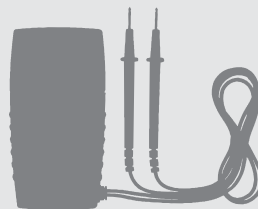
How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	TB-3000	
DC voltage	200 mV	±0.5 %, +3 digit
	2, 20, 200, 600V	±0.8 %, +5 digit
AC voltage	2, 20 V	±1.5 %, +5 digit
	200, 600 V	±1.5 %, +5 digit
DC current	200 µA, 2000 µA	±1.0 %, +3 digit
	10 A	±1.2 %, +5 digit
AC current	200 µA, 2000 µA	±1.3 %, +5 digit
	10 A	±1.5 %, +8 digit
Resistance	200 Ω	±1.0 %, +5 digit
	2 kΩ, 20 kΩ, 200 kΩ	±1.0 %, +5 digit
	2 MΩ,	±1.0 %, +5 digit
	20 MΩ	±1.8 %, +5 digit
Diode test	Test current 0.6 mA	
	No-load voltage typ. 1.5 V	
Continuity test	Audible signal if resistance <50 Ω	
Non-contact voltage test	100 – 600 V AC (optical and acoustic)	
Maximum input voltage	600 V AC/DC	
Input impedance	>7.5 MΩ, typ 10 MΩ (AC V & DC V)	
AC V bandwidth	50 to 400 Hz	
Auto power-off function	15 minutes	
Overvoltage protection	CAT IV 600 V	
Power supply	2× 1.5 V	
Operating temperature range	0 °C to +40 °C (32 °F to 104 °F)	
Storage temperature range	-10 °C to +50 °C (14 °F to 122 °F)	
LED torch	ø 5 mm white high-performance LED	
Dimensions	165 × 85 × 32 mm	
Weight	300 g incl. batteries	
Scope of delivery	1× operating instructions	
	1× test leads	
	1× carrying case+	
	2× 1.5 V AAA batteries, (L)R03	

LED | 600 V AC/DC | ACOUSTIC | RESISTANCE | OPTICAL | CAPACITIVE | NON-CONTACT | 4 mm RESPONSE | CALIBRATION ON REQUEST | 5 YEAR WARRANTY

MULTIMETER | TESTBOY POCKET | High-performance multimeter with large LC display

The Testboy Pocket is a high-performance multimeter with a large, clearly legible LC display. Its robust design allows it to be used even in tough conditions. The auto-ranging function eliminates the troublesome task of switching between measuring ranges and the data hold function saves the measurement result.
Easy handling and auto-ranging make the Testboy Pocket an ideal tool for any service engineer.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy Pocket
AC voltage	0-300 V $\pm$1.5 %, +3 digit
DC voltage	0-300 V $\pm$1.8 %, +3 digit
Resistance	0-40 MΩ (<200 Ω $\pm$2.5 %, +4 digit; 200 Ω $\pm$2 % +3 digit)
Continuity test	With acoustic signal
Input impedance DC V & AC V	>200 kΩ
AC V bandwidth	40-70 Hz
Frequency measuring range	0-200 kHz
Capacity measuring range	0-200 µF
Duty cycle in %	Yes
Diode test	Yes
Continuity test	<50 Ohm acoustic
Data hold	Yes
Overvoltage protection	CAT III 300 V
Power supply	2× 1.5 V AAA batteries, LR03
Operating temperature range	0 °C to +40 °C ≤75 % RH
Storage temperature range	-10 °C to +50 °C ≤75 % RH
Dimensions	119 × 65 × 18 mm
Weight	130 g
Colour	Red / black
Scope of delivery	1× operating instructions 2× 1.5 V AAA batteries, (L)R03 1× carrying case

LED   ACOUSTIC   Ω RESISTANCE   5 YEAR WARRANTY

MULTIMETER | TESTBOY 312 | Digital multimeter with true RMS and bar graph

What sets the Testboy 312 apart is its measurement accuracy. The extremely effective measuring procedure prevents measuring errors in the case of non-sinusoidal or non-linear curves.

The 44 mm display ensures clearly legible results, and the background can be lit up if required. Particularly practical: the test result can be frozen with the data hold function.

This means several measurements can be compared and calculated. After extended periods of inactivity, the Testboy 312 is switched off automatically by the auto power-off function.

The Testboy 312 also has important functions such as relative measurement, min. / max. measurement and frequency measurement.

Its overvoltage category CAT III 1000 V means it can be used for a wide range of applications in trade and industry.

With the integrated USB interface, all measurements can be evaluated with the Windows software.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 312
Indication	44 mm LCD, 4 ¾ digit
AC V	50 m, 500 m, 50, 500, 1000 V ±0,5 %
DC V	50 m, 500 m, 50, 500, 1000 V ±0.5 %
AC	500 µ, 5 m, 500 m, 5, 10 A ±1.5 %
DC	500 µ, 5 m, 500 m, 5, 10 A ±0.5 %
Resistance	500, 5 k, 50 k, 500 k, 5 MΩ ±0.1 %, 50 MΩ ±0.5 %
Duty cycle	5 Hz – 500 kHz, 1 % – 99 %
Logic frequency	5 Hz – 5 MHz ±0.006 %, Vpp 2 – 5 V rectangular
Linear frequency	10 Hz – 200 kHz ±0.006 %, Vpp 10 mV sensitive
Continuity test	With acoustic signal
Diode test	Block voltage in mV
PC interface	USB interface with Windows software
Overvoltage category	CAT III 1000 V
Dimensions	200 × 100 × 40 mm
Weight	600 g
Colour	Red, other colours on request
Power supply	6 × 1.5 V AAA
Scope of delivery	1× operating instructions 2× test leads 1× Windows software CD ROM 6× 1.5 V AAA batteries, (L)R03 1× interface cable

600 V AC/DC	ACOUSTIC	Ω RESISTANCE	OPTICAL	F CAPACITY	HZ FREQUENCY

MULTIMETER | TESTBOY 313 | Digital multimeter

The Testboy 313 is used in the electrical installation, service and industrial fields. Testboy measuring and testing instruments have been providing support for users in all fields of application for decades.
The Testboy 313 is equipped with an easy-to-read 37 mm LCD display, backlighting and mechanical measuring range protection. The measuring range protection prevents operating errors.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	TB 313	
DC voltage	200 mV, 2, 20, 200,	±0.5 %, +3 digit
	600 V	±0.8 %, +5 digit
AC voltage	2, 20, 200 V,	±1.0 %, +5 digit
	600 V	±1.2 %, +5 digit
DC	2 mA, 20 mA,	±1.0 %, +3 digit
	200 mA	±1.5 %, +3 digit
	10A	±2.0 %, +5 digit
AC	2 mA, 20 mA,	±1.0 %, +5 digit
	200 mA	±1.5 %, +3 digit
	10 A	±2.0 %, +8 digit
Resistance	200 Ω	±1.0 % + 5 digit
	2 k, 20 k, 200 kΩ	±1.0 %, +5 digit
	2 MΩ,	±1.0 %, +5 digit
	20 MΩ	±1.5 %, +5 digit
Diode test	√	
Continuity test	√	
Temperature measurement	-20 °C to 1000 °C	
Maximum input voltage	600 V AC/DC	
Input impedance	>7.5 MΩ, typ 10 MΩ (AC V & DC V)	
AC V bandwidth	50 to 400 Hz	
Overvoltage protection	CAT III 600 V	
Fuses	200 mA (self-resetting)	
	10 A / 1000 V (flink)	
Power supply	1× 9 V 6LR61	
Operating temperature range	0 °C to +40 °C (32 °F to 104 °F)	
Storage temperature range	-10 °C to +50 °C (14 °F to 122 °F)	
Dimensions	200 × 89 × 38 mm	
Weight	380 g incl. batteries	
Scope of delivery	1× operating instructions	
	1× test leads	
	1× holster	
	1× temperature probe	
	1× battery 9 V, 6LR61	

600 V AC/DC · **ACOUSTIC** · **Ω RESISTANCE** · **CALIBRATION ON REQUEST** · **5 YEAR WARRANTY**

OVERVIEW | CURRENT CLAMPS

Current clamps can be used to measure DC and AC without having to turn off the operating voltage. Any possible dangers, e.g. short circuits, can be ruled out.

Current clamps can also have other measurement functions, e.g.: voltage, resistance and continuity testing.

Simplicity and straightforward operation are just two of the great benefits of a current clamp. The conducting cable is completely enclosed by the current clamp. During a measurement, the value can then be read off a digital or analogue display.

APPLICATIONS

1. Testboy TV 216N
2. Testboy TV 218
3. Testboy TV 216N
4. Testboy TV 218

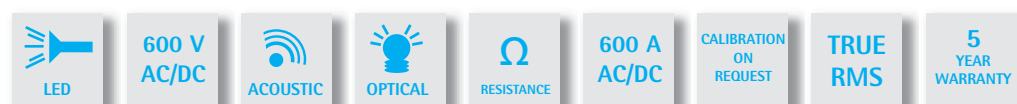## CURRENT CLAMPS | TESTBOY TV 216N | Digital clamp meter

The Testboy TV 216N digital clamp meter has a clearly legible display. A special feature of this measurement clamp is the option to use the standard TRMS measurement process to switch to an effective, min., max. or differential measurement. Manual or automatic ranging ensures versatility and safety. The plastic case included in the scope of delivery protects the device and all accessories even during transportation. Our TV 216N is the perfect choice for use in the service area, in industry or for installation tasks!

SPECIFICATIONS

Technical data	Testboy TV 216N
Indication	4 digit LCD, 6599
AC	60 A, 600 A, 40 to 400 Hz
Accuracy	±3.0 %, +10 digit
Maximum resolution	10 mA
DC	60 A, 600 A
Accuracy	±3.0 %, +10 digit
Maximum resolution	10 mA
AC V	600 mV, 6, 60, 600 V, 40 to 400 Hz
Accuracy	±1.5 %, +10 digit to 600 mV/±1.2 %, +5 digit to 60 V / ±1.5 % +10 digit to 600 V
Maximum resolution	100 µV
Input resistance	10 MΩ
DC V	600 m, 6, 60, 600 V
Accuracy	±0.8 %, +3 digit to 60 V / ±1.0 %V+5 digit to 600 V
Maximum resolution	100 µV
Input resistance	10 MΩ
Frequency meas. at clamp	600 Hz, 1 kHz, >1 A AC rms
Accuracy	±1.5 %, +5 digit to 1 kHz
Maximum resolution	100 mHz
Frequency meas. at socket	600 Hz, 6 kHz, 10 kHz, >0.2 V AC rms
Accuracy	±1.5 % +5 digit to 10 kHz
Maximum resolution	100 mHz
Sampling rate	10 to 95 %, ±3.0 %, >1 A AC rms
Frequency range	10 Hz to 1 kHz
Resistance	600, 6 k, 60 k, 600 k, 6 M, 60 MΩ
Accuracy	±1.2 %, +2 digit to 6 MΩ ±2.0 %, +5 digit to 60 MΩ
Maximum accuracy	100 mΩ
Diode test	Test current ~1 mA, test voltage ~3.3 V
Resolution	1 mV
Continuity test	Audible continuity signal below 30 Ω
Power supply	3× 1.5 V
Overvoltage cat.	CAT III 600 V
Dimensions	220 × 75 × 35 mm
Weight	340 g
Colour	Red / black, other colours on request
Scope of delivery	1× operating instructions 1× test leads 3× 1.5 V AAA batteries, (L)R03 1× carrying case

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

| LED | 600 V AC/DC | ACOUSTIC | OPTICAL | Ω RESISTANCE | 600 A AC/DC | CALIBRATION ON REQUEST | TRUE RMS | 5 YEAR WARRANTY |

CURRENT CLAMP | TESTBOY TV 218 | Digital miniature clamp meter

The Testboy TV 218 digital miniature clamp meter has a "Data Hold" function and an LC display with 3¾ digits. This means DC and AC can be measured in two measuring ranges (40 A and 200 A).
The "true RMS" function offers precise measurement results.

The Testboy TV 218 is a small and lightweight clamp meter. Its small size means it can also be used in hard-to-access places.
The "Data Hold" function allows the user to freeze the measurement value on the display.
The "Auto Power-Off" function guarantees automatic shutdown when not in use to save the battery.
All functions and the small clamp size make it a perfect tool for daily use.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

| Technical data	Testboy TV 218
Indication	3¾ digits, 4000 counts
DC	40 A, 200 A, ($\pm$3.0 % +5 digits)
AC	40 A, 200 A, ($\pm$2.5 % +8 digits)
Resolution	0.01 A at 40 A 0.1 A at 200 A
Max. jaw opening	ø 21 mm
Sampling rate	3 times per second
Operating temperature range	0 °C to +40 °C <75 % RH
Storage temperature range	-20 °C to +60 °C <80 % RH
Power supply	2× 1.5 V; LR44
Overvoltage category	CAT III 300 V
Dimensions	155 × 50 × 25 mm
Weight	95 g
Colour	Red / black, other colours on request
Scope of delivery	1× operating instructions 2× LR44 batteries 1× carrying case

200 A
AC/DC

TRUE
RMS

5
YEAR
WARRANTY

OVERVIEW | CAR ELECTRONICS

The use of increasingly complicated electronics systems in the automotive industry means greater demand for the right measurement tools.

Which is why we are developing devices to meet market requirements.
These electronic test and measuring instruments are also subject to international standard IEC/EN 61010-1.
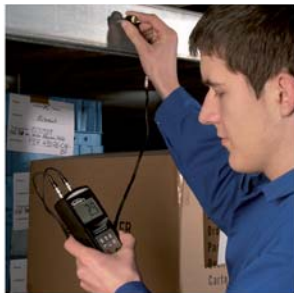
APPLICATIONS

1. Testboy 75
2. Testboy 55
3. Testboy Car Tester
4. Testboy Light 500
5. Testboy 72
6. Testboy 70

CAR ELECTRONICS | TESTBOY 51 | Brake fluid tester (DOT4)

The Testboy 51 is a handy testing pin, something that any car repair shop foreman or car mechanic should have. Its user-friendliness and compact design will appeal to any car mechanic.

The Testboy 51 can be used to check the water content in glycol-based brake fluid quickly and precisely. Five LEDs indicate the water content in the brake fluid in increments of 0 %, <1 %, approx. 2 %, approx. 3 % and >4 %. This enables the user to recognise when the brake fluid has to be replaced. Self-testing with the device is also possible.

Car repair shops use the Testboy 51 as part of their on-the-spot during order acceptance, allowing the customer to make a decision based on the result. Oil companies, HGV and motorbike workshops have come to the conclusion that our brake fluid tester improves safety and broadens the scope of their equipment.

Made of impact-resistant and break-proof ABS plastic, the housing underlines the professional appearance. The acid-proof, glass-fibre reinforced housing contributes to the long service life of the device.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)
| Brake fluids DOT 4
| Illuminated measuring points
| Robust due to glass-fibre reinforced nylon
| Long service life, as acid and alkali-resistant
| LED battery indication

SPECIFICATIONS

Technical data	Testboy 51
Indication	Optical via 5 LEDs
Measuring range	Brake fluid (DOT 4)
Power supply	1× 23 A
Dimensions	152 × 23,5 mm
Protection class	IP40
Weight	40 g
Colour	Black, other colours on request
Scope of delivery	1× operating instructions 1× battery 2 × micro 1.5 V AAA batteries, (L)R03

OPTICAL

5 YEAR WARRANTY
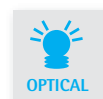
CAR ELECTRONICS | TESTBOY 55 | Brake fluid tester (DOT 3, DOT 4, DOT 5.1)

The Testboy 55 is a handy testing pin, something that any car repair shop foreman or car mechanic should have. Its user-friendliness and compact design will appeal to any car mechanic.

The Testboy 55 can be used to check the water content in brake fluid quickly and precisely. The 3-stage LED display shows the quality status of the brake fluid.
Car repair shops use the Testboy 55 as part of their on-the-spot check during the order acceptance process. Oil companies, HGV and motorbike workshops have also come to conclusion that our brake fluid tester ought to be part of the standard equipment of any garage or workshop.

DOT 3, DOT 4 and DOT 5.1 switch-over also possible.

How you benefit:
| 5-year manufacturer's warranty
| Brake fluids DOT 3, 4, 5.1
| Illuminated measuring points
| Robust due to glass-fibre reinforced nylon
| Long service life, as acid and alkali-resistant
| LED battery indication

SPECIFICATIONS

Technical data	Testboy 55
Indication	Optical via 3 LEDs Good / Attention / Replacement necessary
Measuring ranges	Brake fluid (DOT 3/4/5.1)
Power supply	2 × micro 1.5 V AAA
Dimensions	152 × 23,5 mm
Protection class	IP40
Weight	40 g
Colour	Black, other colours on request
Scope of delivery	1× operating instructions 2× micro 1.5 V AAA batteries, (L)R03

OPTICAL

5 YEAR WARRANTY

CAR ELECTRONICS | TESTBOY 70 | Coating thickness meter

The successful concept of the Testboy 70 coating thickness meter is based not only on the high degree of measuring precision, but also on the fact that it is extremely easy and safe to use. Its robust plastic housing is UV-resistant and splash-proof. It measures all non-magnetic coatings on steel or iron, such as paintwork, enamel, chrome, copper, zinc, etc. When you change probes, it is also possible to measure all insulating coatings, such as paints, plastics, enamels, etc., on non-magnetic metals (e.g. on aluminium, copper or brass). The Testboy 70 is particularly suitable for use in car dealerships and by experts for examining vehicles for signs of previous accident damage.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 70
Indication	4 digit LCD
Measuring range	0 – 1000 µm / 0 – 40 mil
Measurement accuracy	$\pm$ (1 ~ 3) % N or $\pm$ 2.5 µm
Minimum measuring area	ø 5 mm
Minimum curvature radius	Fe: Convex 1.5 mm NFe: 3 mm
Minimum substrate thickness	Fe: 0.5 mm NFe: 0.3 mm
Operating temperature	0 °C to +40 °C
Power supply	3× 1.5V
Dimensions	158 × 74 × 31 mm
Weight	220 g
Colour	Black, other colours on request
Scope of delivery	1× operating instructions 4× 1.5 V AAA micro batteries, (L)R03 1 × Fe probe 1 × NFe probe 1 × service case

CALIBRATION
ON
REQUEST

5
YEAR
WARRANTY

CAR ELECTRONICS | TESTBOY 72 | Coating thickness meter with combi-probe

The Testboy 72 coating thickness meter is distinguished by its high degree of measuring precision, as well as the fact that it is extremely easy and safe to use. Its robust plastic housing is UV-resistant and splash-proof. It measures all non-magnetic coatings on steel or iron, such as paintwork, enamel, chrome, copper, zinc, etc. It also measures the thickness of all insulating coatings, such as paintwork, plastics, enamels, etc. on non-magnetic metal substrates (e.g. aluminium, copper or brass). The combi-probe changeover for various substrates is automatic. The integrated memory stores the last 10 measurement values.
The swivel display ensure that measurements can also be taken under the most difficult of conditions. The Testboy 72 is particularly suitable for use in car dealerships for examining vehicles for signs of previous accident damage.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)
| Automatic swivel display

SPECIFICATIONS

Technical data	Testboy 72
Indication	3 digit LCD
Measuring range	0 – 2000 µm / 0 – 40 mil
Measurement accuracy	±2 µm (+3 %), ±0.1 mil (+3 %)
Minimum measuring area	ø 7 mm
Minimum curvature radius	Fe: Convex 1.5 mm NFe: 3 mm
Minimum substrate thickness	Fe: 0.5 mm NFe: 3 mm
Operating temperature	0 °C to +40 °C
Power supply	1× 1.5 V AAA
Dimensions	94 × 48 × 24.2 mm
Weight	72 g
Colour	Black, other colours on request
Scope of delivery	1× operating instructions 1× 1.5 V AAA micro battery, (L)R03 1× service case

CALIBRATION ON REQUEST

5 YEAR WARRANTY

CAR ELECTRONICS | TESTBOY 74 | Coating thickness tester with LED display

The pen-shaped Testboy 74 coating thickness tester is characterised by its simplicity and ease of use.
Its sturdy plastic casing protects the measurement electronics.
The clear LED display means that all non-magnetic coatings, such as paint, enamel, chrome, copper or zinc, on steel or iron, can be checked quickly and easily.

The Testboy 74 is particularly suitable for use in car dealerships for examining vehicles for signs of previous accident damage.

How you benefit:
| 5-year manufacturer's warranty
| Fast, straightforward testing

SPECIFICATIONS

Technical data	Testboy 74
Indication	3 LEDs for displaying performance
Measuring ranges	0 – 400 µm
Measurement accuracy	± 15 %
Minimum measuring area	ø 7 mm
Minimum substrate thickness	Fe: 0.8 mm
Operating temperature	0 °C to +40 °C
Power supply	1× 12 V type V23
Dimensions	L = 160 mm / 33 mm
Weight	80 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions
	1× 12 V battery, type V23

OPTICAL

5
YEAR
WARRANTY

CAR ELECTRONICS | TESTBOY 75 | Ultrasonic thickness meter

The successful concept of the Testboy 75 ultrasonic thickness meter is based not only on a high degree of measuring precision, but also on ease of use and safety. Its robust plastic housing is UV-resistant and splash-proof.
The device is used to measure the material thickness of metals, plastics and glass.
The Testboy 75 is ideal for applications in industry and the automotive sector.

Using an ultrasonic sensor, the Testboy 75 is able to accurately determine the material thicknesses of steel, aluminium, copper, brass, quartz glass, PVC, zinc, cast iron, polyethylene and grey cast iron.

The Testboy 75 is state of the art and meets the requirements of the applicable European and national guidelines.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy 75
Indication	4 digit LCD
Measuring range	1.2 – 200 mm
Measurement accuracy	± 0.5 mm
Minimum measuring area	ø 5 mm
Resolution	0.1 mm
Sound velocity	500 m/s to 9000 m/s
Materials	Steel, aluminium, copper, brass, quartz glass, PVC, zinc, cast iron, polyethylene, grey cast iron
Operating temperature	0 °C to +50 °C
Power supply	3× 1.5V
Dimensions	158 × 74 × 31 mm
Weight	220 g
Colour	Black, other colours on request
Scope of delivery	1× operating instructions 4× 1.5 V AAA micro batteries, (L)R03 1× ultrasonic sensor 1× glycerine 1× service case

CALIBRATION
ON
REQUEST

5
YEAR
WARRANTY

CAR ELECTRONICS | TESTBOY CAR TESTER | Voltage tester

The Testboy Car Tester is ideal for troubleshooting in cars, commercial vehicles and all applications in the 3 – 48 V DC and AC ranges. As well as polarity, the LEDs indicate the voltage in the 12, 24 and 48 V ranges.

The integrated piercing probe facilitates the testing of hard-to-access cables.

The Car Tester is used in cars and commercial vehicles in particular. Thanks to the polarity indicator, the tedious swapping over of test leads is no longer necessary.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy Car Tester
Indication	Optical, 4 LEDs
Measuring ranges	3 – 48 V AC/DC
Power supply	Via measurement object
Dimensions	145 × 25 x16 mm
Weight	120 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions

3 V–
48 V
AC/DC

OPTICAL

5
YEAR
WARRANTY

CAR ELECTRONICS | TESTBOY LIGHT 500 | LED work light with NiMH battery / holding magnets

The Testboy Light 500 is a high-performance LED work light with NiMH battery. It is a robust, impact-resistant, and acid and oil-resistant portable LED light with 27 ultra-bright white LEDs. The maintenance-free NiMH battery provides a burn time of approx. 4.5 h. The charging time is 2 h. Charging is carried out via the charging adapter supplied. The light is splash-proof (IP54). The integrated microprocessor ensures optimum charging, operational reliability and brightness control. The small and compact design of the Testboy Light 500 makes it ideal for use in confined workspaces, such as an engine compartment.

The light can be secured to the sides using two integrated holding magnets or with the hook on the top cap.

How you benefit:
| 5-year manufacturer's warranty (excl. batteries)
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy Light 500
Indication	27 bright white LEDs
LED configuration	1× centre row as a spot 2× outside rows as diffused light
Suspension	360° using rotating hook
Fixing	Magnets on 2 sides
Power supply	1× 3.6 V 1800 mAh NiMH battery
Operating time	4.5 hours
Change time	2 hours
Protection class	IP54
Dimensions	320 × 40 × 45 mm
Weight	320 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 1× charger (230 V~) 1× auto charger (12 V=)

LED   OPTICAL   5 YEAR WARRANTY
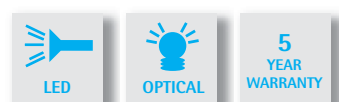
OVERVIEW | SOCKET OUTLET TESTERS

Our socket outlet testers are indispensable test instruments that protect you against life-threatening electric shocks from faulty connections.

Professional tradesmen use them to check socket outlets, device cabling, connection cables and cable drums.

Together with suitable adapters, the socket outlet testers can also be used for recreational applications such as caravans, boats, etc.

The Schuki 1, Schuki 2 and Schuki 2K devices can also be used to test RCD circuit breakers.

On building sites, the distribution box should be checked at least once a month. For daily testing, all users have to do is push the test button on the RCD to guarantee correct functioning.
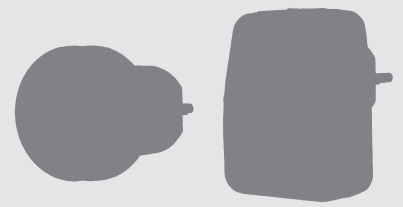
Thanks to their simple and clear design, the Testavit Schuki 1 to 3 socket outlet testers can be safely used by laymen.

APPLICATIONS

1. Testavit Schuki 2
2. Testavit Schuki 3
3. Testavit Schuki 1
4. Testavit Schuki 2K

SOCKET OUTLET TESTERS | TESTAVIT SCHUKI 1/3 | Socket outlet testers

Schuki 1 | Socket outlet tester with RCD trip function

The Testavit Schuki 1 and Testavit Schuki 3 socket outlet testers are essential test instruments for all professional tradesmen. The test instruments indicate any dangerous faulty connections in the socket outlets by means of various signal lamp lighting configurations. This means installations can be checked quickly and safely.

The Testavit Schuki 1 also has an RCD test function. This allows RCD circuit breakers with a rated current of 30 mA and a trip-out time of 200 ms to be tested.

Schuki 3 | Socket outlet tester

The Testavit Schuki 1 and 3 can be used to check socket outlets, cable drums, device wiring and connecting cables in 230 V installations. An adapter enables them to be used for recreational applications, e.g. boats and caravans. Correct wiring connections are checked.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testavit Schuki 1	Testavit Schuki 3
Indication	Optical, glow lamps	Optical, glow lamps
Operating voltage	230 V, 50 Hz	230 V, 50 Hz
Power supply	Via measurement object	Via measurement object
Rated fault current	30 mA	-/-
Trip-out time	200 ms	-/-
RCD test	Yes	No
Dimensions	65 × 50 x75 mm	ø 50 × 75 mm
Overvoltage category	CAT III 300 V	CAT III 300 V
Weight	100 g	70 g
Colour	Red, other colours on request	Red, other colours on request
Scope of delivery	1× operating instructions	1× operating instructions

OPTICAL

5 YEAR WARRANTY
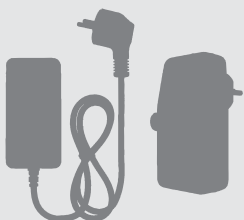
SOCKET OUTLET TESTERS | TESTAVIT SCHUKI 2/2 K | Socket outlet testers

Schuki 2 | Socket outlet tester with adjustable RCD trip function

The Testavit Schuki 2 and Schuki 2K can be used to check socket outlets, cable drums, device wiring and connecting cables in 230 V installations. An adapter enables them to be used for recreational applications, e.g. boats and caravans. Correct wiring connections are checked.

Schuki 2K | Socket outlet tester with adjustable fuse resolution

The Testavit Schuki 2K is equipped with a practical cable and safety Schuko plug. This makes testing more convenient for the user where socket outlets are difficult to access.

How you benefit:

| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testavit Schuki 2	Testavit Schuki 2K
Indication	Optical, glow lamps	Optical, glow lamps
Operating voltage	230 V, 50 Hz	230 V, 50 Hz
Power supply	Via measurement object	Via measurement object
Rated fault current	10, 30, 100, 300, 500 mA	10, 30, 100, 300, 500 mA
Trip-out time	200 ms	200 ms
RCD test	Yes	Yes
Dimensions	100 × 50 × 75 mm	100 × 50 × 75 mm
Overvoltage category	CAT III 300 V	CAT III 300 V
Weight	180 g	250 g
Colour	Red, other colours on request	Grey, other colours on request
Scope of delivery	1× operating instructions 1× carrying case	1× operating instructions 1× carrying case

OPTICAL

5 YEAR WARRANTY
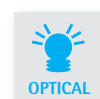
OVERVIEW | INSTALLATION TESTER / ADAPTER

All new installations and alterations to electrical equipment or installations must be checked and in some cases undergo an acceptance process. This is meant to avoid damage to property and personal injury.

DIN VDE 0100, Part 610, regulates the inspection of electrical equipment and installations.

In some cases, a visual safety inspection of electrical equipment and installations is not sufficient.
In such cases, a test record must be provided to prove adherence to the legally permissible limit values.

Not only are electrical equipment and installations subject to the requirements of a standard, the test instruments themselves also have to comply with a standard – the IEC/EN 61010-1, DIN VDE 0411.

Adherence to these regulations guarantees the safety of all persons directly or indirectly involved with testing.

In practice, many measurements have to be performed on live components, in which case using a clearly designed and easy-to-operate Testboy measuring instrument can be an advantage.

There are various measuring instruments on the market for different applications:
e.g. phase sequence indicator, insulation measuring instruments, earth resistance measuring instruments, cable tracer, etc.

APPLICATIONS

1. Testboy 26
2. Testboy TV 410N
3. Testboy TV 416

INSTALLATION TESTER / ADAPTER | TESTBOY 26 | Cable tracer set with LED torch light

The Testboy 26 is a cable detector that makes it easier to find cables in walls and cable ducts. The depth to which the Testboy 26 can detect cables depends on the composition of the wall (e.g. brick, plaster, concrete).

A lined case with belt loop is included in the scope of delivery. It is suitable for transporting both devices safely and reliably.

A carrier signal from the transmitter is modulated by means of crocodile clips or the adapter to one end of the cable. This allows the other end of the cable to be found quickly and precisely with the receiver without contact or having to strip the cable insulation. The transmitter is voltage-stable up to 400 V.

Two-core cables (e.g. in telecommunications technology) can be accurately identified by the Test Boy 26.

The sensitivity of the handy receiver is infinitely adjustable and it has a socket for earphones for working in loud environments. You can switch the transmitter to transmit either a steady or alternating tone.
Short circuits are detected quickly and reliably by the integrated continuity tester.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)
| Adapter set (coaxial, F and RJ45 adapters)

SPECIFICATIONS

Technical data	Testboy 26
Indication	Acoustic
Power supply	2× 9 V
Dimensions	230 × 55 × 23 mm (receiver) 55 × 57 × 23 mm (transmitter)
Weight	244 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 1× transmitter 1× receiver 2× 9 V block batteries, 6LR61 1× carrying case 1× adapter set

LED   ACOUSTIC   HEADPHONE CONNECTION   5 YEAR WARRANTY

Network tester | TESTBOY 28| Network tester for USB–RJ 11 and BNC cables

The TESTBOY 28 is a handy digital multifunctional network tester and cable length measuring device.
It contains a tone generator and a port finder function. The test results are displayed on the clear LCD display. The TESTBOY 28 can be used to examine standard cable sizes for errors, including the split pair error. It can also measure cable length and detect cable faults. A handy and easy-to-use tester that is indispensable for professional users and installers.

Technical scope:
Identification, continuity, interruption, short circuit, cable length

How you benefit:
| 5-year manufacturer's warranty

SPECIFICATIONS

Technical data	Testboy 28
Indication	Dot matrix display
Measuring application	USB, RJ11, BNC cables
	Cable length measurement
Power supply	1× 9 V type 6LR61
Dimensions	L/W/D = 150/65/25 mm
Weight	190 g incl. battery
Colour	Red
Scope of delivery	Instruction manual 1 Battery 9V, 6LR61

5
YEAR
WARRANTY

INSTALLATION TESTER / ADAPTER | TESTBOY TV 416 / 432 (A) | CEE adapter*

TESTBOY TV 416 / 432 | CEE adapter with phase sequence indication
The Testboy TV 416 / 432 is made up of a combination of CEE plug, Schuko safety socket outlet and integrated electronics for phase sequence measurements. Missing or incorrectly wired conductors are indicated by the integrated signal lamps. In conjunction with the Testavit Schuki 1, 2 or 2K, it is possible to test the wiring and the effectiveness of the RCD circuit breaker. The Testboy TV 416 / 432 is available in two versions for 16 A and 32 A CEE socket outlets.

TESTBOY TV 416 A / 432 A | CEE combi-adapter (16 A/32 A)
The Testboy TV 416 A / 432 A is a compact combi-adapter made of unbreakable PE material, CEE plug (16 A/32 A) with socket outlet with earthing contact and sprung flap. Versions for use in Belgium and France are also available.
When used in conjunction with the Testavit Schuki 1, 2, 2K or 3, dangerous faulty wiring in CEE socket outlets can be detected.
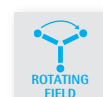
How you benefit:
| 5-year manufacturer's warranty
**|** IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy TV 416 / 432	Testboy TV 416A / 432A
Indication	Glow lamps	- / -
Power supply	Via the measurement object	- / -
Overvoltage category	CAT III 400 V	CAT III 400 V
Dimensions	165 × 65 mm	165 × 65 mm
Weight	250 g	250 g
Colour	Red / white / blue	Red / white / blue
Scope of delivery	1× operating instructions	1× operating instructions

* FOR TEST PURPOSES ONLY

ROTATING FIELD

16/32 A

5 YEAR WARRANTY
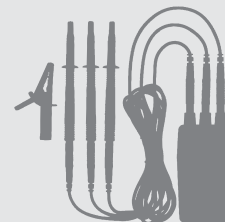
INSTALLATION TESTER / ADAPTER | TESTBOY TV 410N | Rotating field tester

The Testboy TV 410N rotating field tester indicates the presence of all three phases by means of the five glow lamps and determines the direction of the rotating field through the correct order of the phases.

The housing is made of impact-resistant, unbreakable ABS plastic, the fully insulated 4 mm sockets and the corresponding comprehensive and adaptable connection cable set ensure safe testing and rapid determination of the phasing in a three-phase system.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy TV 410N
Indication	Optical, 5 glow lamps
Voltage range	60 – 400 V AC
Current consumption	<3 mA
Frequency range	50 / 60 Hz
Power-on time	30 s
Power supply	Via measurement object
Overvoltage category	CAT III 400V
Dimensions	115 × 60 × 25 mm
Weight	75 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 3× profi test tips 3× 4 mm safety leads 1× profi crocodile clip 1× carrying case

OPTICAL

ROTATING FIELD

5 YEAR WARRANTY

INSTALLATION TESTER / ADAPTER | TESTBOY TV 430N | Digital insulation tester

The Testboy TV 430N is a digital insulation measuring instrument that makes it easy to check the insulation resistance of devices, electrical systems and circuits with three selectable test voltages (250, 500 and 1000 V DC). A continuity tester and an AC voltmeter have also been integrated to round off the options for use in a wide variety of applications. The most important aspect when measuring insulation resistance is the elimination of the effects of any capacitance. This is achieved by measuring with DC voltage. In order to achieve a meaningful result, the test voltages and the test current are defined so that the influence of the current or voltage-dependent resistances remains the same. During initial testing, the measurement of the insulation resistance must be carried out between each active cable and earth.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy TV 430N
Indication	3½ digit LC display
Insulation test	
Test voltage	250 V / 500 V / 1000 V DC
Measuring range	2 MΩ to 2000 MΩ
Resolution	1 kΩ
Test current	1 mA
Accuracy	0.25 MΩ to 200 MΩ ±3 % +3 digit
	200 MΩ to 2000 MΩ ±5 % +5 digit
Continuity test	
Acoustic signal	<50 Ω
Test voltage	~2.8 V
AC voltage testing	
Measuring range	0 to 600 V AC
Resolution	1 V
Accuracy	±1.5 % +3 digit
Power supply	6× 1.5 V
Overvoltage category	CAT II 600 V
Dimensions	188 × 110 × 62 mm
Weight	485 g
Colour	Red, other colours on request
Scope of delivery	1× test lead set
	1× operating instructions
	6× 1.5 V AA (L)R06 batteries
	1× carrying case

| 600 V AC/DC | Ω RESISTANCE | 5 YEAR WARRANTY |

INSTALLATION TESTER / ADAPTER | TESTBOY TV 440N | Digital earth resistance meter

The Testboy TV 440N earth resistance measuring instrument is suitable for checking the resistance between the reference earth and the connection point of the earthing system. Earth measurements are prescribed for systems that are protected by automatic disconnection of the supply, as well as in lightning protection systems, telecommunications and fuel storage depots.

The auto power-off function prevents uncontrolled discharging of the batteries. The integrated timer turns the instrument off after five minutes of measurements; however, the data hold function saves the last measurement result.

The requirements for measuring earth resistance are described in the standards DIN VDE 0413, Part 5, and EN 61557-5. Measurements for determining the earth resistance are carried out according to the current / voltage method. For measurement purposes, an alternating current is fed between the earth strip and the earth electrode to be measured.

The voltage drop is measured and the earth resistance is determined with a probe positioned in the area of the reference earth of the earth electrode.

In this case, the alternating current prevents influences through polarisation at the junction between the metal earth electrode and earth. Measurements can be carried out according to the two or three-wire principle.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

SPECIFICATIONS

Technical data	Testboy TV 440N
Indication	LC display, 3½ digit
Measuring ranges	Earth resistance
	20 Ω, 200 Ω, 2000 Ω $\pm$2 % +3 digit Earth voltage 0 to 200 V, 40 to 400 Hz $\pm$1.5 % +5 digit
Resolution	0.01 Ω at 20 Ω 0.1 Ω at 200 Ω 1 Ω at 2000 Ω
Measuring system	Constant current, 2 mA
Power supply	6× 1.5 V
Overvoltage category	CAT III 600 V
Dimensions	168 × 110 × 62 mm
Weight	590 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 2× earth rods 1× test lead set 6× 1.5 V AA batteries, (L)R06 1× carrying case

Ω RESISTANCE

5 YEAR WARRANTY
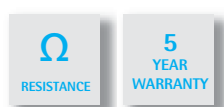
DEVICE TESTER | TESTBOY TV 455 | Installation tester VDE tester 0100–600

The Testboy 455 is an easy-to-use DIN VDE 0100 measuring instrument. Stored safety and RCD (fuse) characteristics evaluate the measured result using GOOD / POOR information. Special features of the Testboy TV 455 include the testing of all-current sensitive RCDs TYPE B. A further advantage is the software included with the delivery.

The large LCD display with integrated backlighting makes it easy to read results, notifications, measurement parameters and messages. Two GOOD / POOR LED indicators are attached to the side of the LCD display.

The housing of the new Testboy TV 455 is sturdy and ergonomic. Its light weight and integrated magnet holder enable you to work without getting tired. The instrument has been designed so that it is extremely clear and simple to operate. Each test has its own specific help screen, which describes
how to carry out a measurement.

How you benefit:
| Testing according to VDE0100-600, ÖVE E8001, NIN/NIV
| Testing of AC/DC-sensitive RCDs (TYPE B)
| USB and RS 232 interface
| Integrated compensation module
| Log according to ZVEH (optional, on request)
| Integrated test lead calibration

SPECIFICATIONS

Technical data	Testboy TV 455
Voltage measurement	0–550 V
Earth resistance measurement	0–9999 Ω
Insulation resistance	0.15 MΩ–1 GOhm
RCD testing	Type A, AC, B
Contact voltage RCD-U_c	0–100 V
Trip-out time	0 to max 2500 ms
Trip-out current	10, 30, 100, 500 and 1000 mA
Indication	128 × 64 pixels with backlighting and integrated GOOD/POOR display
Power supply	9 V DC (6× AA batteries)
Operating temperature	0 to +40 °C
Overvoltage protection	CAT III 600 V / CAT IV 300 V
Measurement value memory	1900
Interface	USB and RS232
Accessories	Universal test leads 3× 1.5 m Schuko test lead, test tips Mains adapter + NiMH AA batteries Carry strap, quick guide, CD + with operating instructions and PC software, factory calibration certificate

AC/DC-sensitive RCD

USB RS232

Incl. software

CALIBRATION ON REQUEST

5 YEAR WARRANTY

DEVICE TESTER | TESTBOY TV 465 | VDE tester 0701 / 0702

The Testboy TV 465 is a mains-independent device tester for testing mobile devices according to DIN VDE 0701-0702. The instrument is easy to operate, which means that devices such as electrical equipment or tools with ON / OFF switch, heating devices, motor devices, lamps, multiple distributors and household appliances can be tested quickly and easily.

The instrument's advantages include good / poor indication and test sequences that are pre-programmed according to VDE or self-defined.

How you benefit:
| Testing according to VDE0701-0702, BGV A3, BetrSichV, ÖVE / Norm E 8701 / E 8702
| Preset limit values according to the VDE standard
| VDE-pre-programmed or self-defined test sequences of instrument classes I, II, III
| Integrated compensation module
| Automatic ranging
| Menu-guided help function
| Large LCD display with integrated backlighting
| Battery capacity sufficient for approx. 2600 test specimens (depending on the number of measurements)
| Integrated charger
| Screening test possible
| 5-year warranty

SPECIFICATIONS

Technical data	Testboy TV 465
Protective conductor resistance	0 Ω to 1999 Ω
(testing current 200mA)	
Insulation resistance	0.00 MΩ to 199.9 Ω
(testing voltage up to 500V DC)	
Alternative leakage current	0.00 mA to 20.0 mA
Measuring voltage	0 V to 300 V
Polarity testing	Test voltage <50 V AC
Overvoltage category	CAT II 300 V
Protection class	I
Interface	RS232 and USB
Power supply	6× 1.2 V NiMH batteries
	(or 6× 1.5 V AA)
Dimensions	235 × 140 × 80mm
Weight	1195g
Scope of delivery	1× user manual
	6× 1.2 V NiMH batteries
	1× carrying case
	1× interface cable (USB+RS232)
	1× test lead with test probe and crocodile clip
	1× IEC connection cable
	1× calibration certificate
Optimum accessories	Memory expansion and software

Incl. software   USB   CALIBRATION CERTIFICATE   5 YEAR WARRANTY

INSTALLATION TESTER / ADAPTER | TESTBOY TV 470 | VDE tester 0701 / 0702 / 0751

The Testboy TV 470 is a handy test instrument designed for safety and repeat testing of portable equipment in accordance with DIN VDE 0701 / 0702 and 0751. These standards provide a framework for protection and safety.

The required level of safety of portable equipment can only be guaranteed by regular testing. With the Testboy TV 470, the user is able to perform tests and document measurement results in line with the applicable standards.

Thanks to the self-explanatory operability, a company can carry out safety and repeat testing itself with trained personnel.

If these standards are amended or supplemented, our update service will provide you with updates free of charge.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)
| Semi-automatic test procedure
| Good / bad assessment at the end of the test
| Data storage for up to 500 test objects
| Help screen support for each measurement
| Barcode reader (included in scope of delivery)
| Logging software (included in scope of delivery)
| DKD calibration certificate

SPECIFICATIONS

Technical data	Testboy TV 470
Indication	Dot matrix LC display 128 × 64 pixels
Power supply	230 V ±10 %; 50 Hz ±2 %
Input current	max. 16 A
Operating temperature	0 to +40 °C
Overvoltage protection	CAT II 600 V
Dimensions	250 × 170 × 55mm
Weight	1445 g
Interface	USB
Measurements	
Protective conductor resistance	0.1 to 20 Ω; ±10 %
Insulation resistance	0.1 to 200 MΩ; ±10 %
Contact current	0.1 to 20 mA; ±5 %
Subst. leakage current	0.1 to 200 mA; ±5 %
Load current	0.2 to 16.0 A; ±5 %
Output	0 to 3700 VA; ±5 %
PELV test	from 25 V eff
Accessories	1× operating instructions 1× test lead set 1× Windows® software CD 1× USB connection cable 1× carrying case 1× mains lead 1× barcode reader

Incl. software   USB   DKD CALIBRATED   5 YEAR WARRANTY

OVERVIEW | THERMOMETER, LUXMETER or RANGE FINDER

Thermometers

Thermometers are used to measure and display the temperatures in all fields of daily life.
In Germany, the temperature is usually measured and indicated in degrees Celsius (°C).
In English-speaking countries, the temperature is given in degrees Fahrenheit (°F).

Luxmeters

The lighting intensity of light sources is measured using luxmeters. The internationally recognised unit of measurement in this case is Lux (L). Too bright or dazzling light is extremely unpleasant for the human eye; in individual cases, it can be the cause of illnesses. As it is hard to imagine not having different light sources in practically all areas of private and public life, guidelines have been developed for many different fields to avoid a risk of accidents.

Range finders

Surface areas, lengths and volumes are calculated with a range finder. As the dimensions no longer have to be taken manually and thanks to accurate IR measurement, measuring errors are avoided. The manually selectable laser functions as a guide. Measurement is carried out quickly, easily and simply even under tough conditions and can also be performed by laymen.

APPLICATIONS

1. Testboy TV 322
2. Testboy TV 325
3. Testboy TV 600
4. Testboy TV 600
5. Testboy TV 332
6. Testboy TV 325

THERMOMETER | TESTBOY TV 322 | Infrared thermometer

Ease of use is what sets the practical Testboy TV 322 infrared thermometer in pistol design apart. The temperature measurement can be carried out exactly thanks to the integrated laser pointer. The manually selected display backlight guarantees that the measurement data can be read even in poor light conditions. Made of impact-resistant and unbreakable ABS plastic, the housing is also suitable for use in tough environments.

Features:
| Data hold function
| Auto power-off function
| °C/°F toggle function
| Manually selectable laser point
| Manually selectable display backlight
| Carrying case for safe transportation

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

The Testboy TV 322 is ideal for use in the following areas:

- Car repair workshops (engines, gearboxes, catalytic converters, brakes, air conditioners, etc.)
- Heating installations
- Refrigeration and air conditioning systems
- Electrical trades (switching cabinets, transformers, cables, etc.)
- Industry (troubleshooting and production monitoring)

The Testboy TV 322 is state of the art and meets the requirements of the applicable European and national guidelines.

SPECIFICATIONS

Technical data	Testboy TV 322
Indication	3-character display with backlight
Detector	Thermopile
Measuring optic	8 : 1
Measuring range	–20 °C to +380 °C; –4 °F to +716 °F
Response time	<1 second
Overflow display	"1" at temperatures >+380 °C / +716 °F or <–20 °C / –4 °F
Emissivity	0.95 (fixed)
Auto power-off	After approx. 15 seconds
Operating temperature	0 °C to +50 °C (32 °F to +122 °F)
Humidity	10 to 80 % RH
Measurement accuracy	±2.0 °C (±1.8 °F)
Power supply	1× 9 V block
Dimensions	175 × 90 × 40 mm
Weight	150 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 1× 9 V block battery, 6LR61 1× carrying case

LASER

°C / °F

5 YEAR WARRANTY
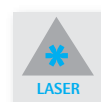
THERMOMETER | TESTBOY TV 325 | Infrared thermometer

Infrared thermometer with integrated LED torch light. The Testboy TV 325 is a practical infrared thermometer in a pistol design. The manually selected display backlight guarantees that the measurement data can be read even in poor light conditions. The TV 325 can also be operated with any standard K-type thermal sensor. Made of impact-resistant and unbreakable ABS plastic, the convenient housing is also suitable for use in tough environments.

Features:
| Data hold function
| Auto power-off function
| °C / °F toggle function
| Manually selectable laser point
| Manually selectable LED torch light
| Manually selectable display backlight
| Min.-max. value memory / alarm function
| Adjustable emissivity

| Averaging
| Carrying case for safe transportation
| K-sensor connection

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)

Due to its comprehensive performance spectrum, as well as its ease of use, the TV 325 is ideal for mobile use in places with restricted access and applications in industrial companies. It is particularly suitable for use in car repair shops, heating installations, refrigeration and air conditioning systems and in the electrical trade. The Testboy TV 325 is state of the art and meets the requirements of the applicable European and national guidelines.

SPECIFICATIONS

Technical data	Testboy TV 325
Indication	4 digit LCD display
Detector	Thermopile
Measuring optic	12 : 1
Measuring range	–60 °C to +500 °C; –76 °F to +932 °F –64 °C to +1400 °C; –82.3 °F to +1999 °F (with K-type probe)
Response time	<0.5 seconds
Auto power-off	After approx. 10 seconds
Operating temperature	0 °C to +50 °C (32 °F to +122 °F)
Humidity	10 to 90 % RH
Infrared measurement accuracy	±1.0 °C (±1.8 °F)
(15~35 °C object temp.)	(ambient temp. 25 °C)
Infrared measurement accuracy	±2 °C or ±2 % (4 °F) the higher value applies
(–33~500 °C object temp.)	(ambient temp. 23 °C ±3 °C)
Measurement accuracy with K-type probe	±1 °C or ±1 % (1.8 °F) the higher value applies (ambient temp. 23 °C ± 6 °C)
Emissivity adjustment	0.95 specified; adjustable from 0.10 to 1.00 in 0.01 increments
Resolution	0.1° (–9.9° to +199.9°)
Temperature probe	Connection option for various K-type probes (see p. 59)
Power supply	2× 1.5 V
Dimensions	49 × 133 × 146 mm
Weight	222 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 2× 1.5 V AAA batteries, (L)R03 1× carrying case 1× K-type probe

LED | K-type | CALIBRATION ON REQUEST | LASER | °C / °F | 5 YEAR WARRANTY

LUXMETER | TESTBOY TV 332 | Digital luxmeter

The Testboy TV 332 is a digital luxmeter in a practical and robust plastic housing. The LC display is 18 mm high and rich in contrast, and makes it possible for the measured light intensity to be read quickly, reliably and accurately. The measuring range ranges from 0 – 50,000 Lux. Using a silicon photo diode behind a large diffuser that is fitted to the instrument by means of a coiled cabled, the light intensity can be read in all positions without any restrictions.

Features:
| Free-moving sensor with coiled cable
| Removable sensor protection
| Carrying case for safe transportation

The digital Testboy TV 332 luxmeter is a high-precision measuring instrument for accurate determination of both the light intensity and the incidence of light on a given surface. The measurement is made by means of a photo element; the measurement result is displayed on the LC display in four measuring ranges.

Whether measuring in conference rooms, classrooms, offices or buildings and establishments with public access, working with the Testboy TV 332 is guaranteed to be safe and convenient. Fast and precise measurement enables decisions to be made on site about any measures that may be necessary.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)
| Automatic swivel display

SPECIFICATIONS

Technical data	Testboy TV 332N
Indication	18 mm LC display, 3½ digit
Increments	0 – 50000 Lux in 3 increments
Measurement rate	0.4 seconds
Operating temperature	0 °C to +50 °C (32 °F to 122 °F)
Operating environment	<80 % RH
Overflow display	"1" display
Power supply	1× 9V
Current consumption	<2mA
Dimensions	118 × 70 × 29 mm
Weight	200 g
Colour	Red, other colours on request
Scope of delivery	1× operating instructions 1× removable sensor protection 1× 9 V block battery 1× carrying case

RANGE FINDER | TESTBOY TV 600 | Infrared distance meter

The Testboy TV 600 measures distances and calculates volume and surface area. It can also add and subtract distances. Height measurements are calculated indirectly using the simple Pythagoras theorem.

The Testboy TV 600 has an easy-to-read display with an integrated backlighting. The auto power-off function guarantees automatic shutdown when not in use to save the battery. The plastic case included in the scope of delivery protects the device even during transportation.

How you benefit:
| 5-year manufacturer's warranty
| IEC/EN 61010-1 (DIN VDE 0411)
| Pythagoras calculation
| Range up to 40 m
| Functions (addition, subtraction, surface area calculation, volume calculation and indirect measurements)

SPECIFICATIONS

Technical data	Testboy TV 600
Measuring range	0.05 m to 40 m
Measurement accuracy	± 3 mm
Resolution	1 mm
Auto power-off	After approx. 180 s
Backlighting	√
Continuous measurement	√
Addition / subtraction	√
Surface area calculation	√
Volume calculation	√
Pythagoras measurement	√
Power supply	2× 1.5 V AAA
Operating temperature	0 °C to +70 °C
Dimensions	116 × 54 × 35 mm
Weight	155 g
Scope of delivery	1× operating instructions
	2× 1.5 V AAA micro batteries
	1× carrying case

LASER

5 YEAR WARRANTY

40 m

ACCESSORIES | TESTBOY

CROCODILE CLIPS

Testboy 2200, Testboy 3000, Testboy Pocket,
Testboy 20 *Plus*, Testboy TV 216N, Testboy TV 215N,
Testboy TV 460, Testboy TV 470 and
Testboy TV 410N

GS-38 TEST TIPS

Testboy Profil LED *Plus* and
Testboy Profil LCD *Plus*

REMOVABLE TEST TIPS

Testboy Profil LED *Plus* and
Testboy Profil LCD *Plus*

TEST TIP PROTECTION

Testboy Profil LED *Plus* and
Testboy Profil LCD *Plus*

TEST LEAD SET CAT III

Testboy 20 *Plus*, Testboy TV 216N, Testboy TV 215N, TB 313,
Testboy 2200, Testboy TV 460 and Testboy TV 470

TEST LEAD SET CAT IV

Testboy 3000

ACCESSORIES | TESTBOY

K–TYPE PROBE
Testboy TV 325

1| TP-K04 penetration probe
Measuring range: –50 °C to +600 °C / tolerance: ± 2.2 °C

2| TP-K03 surface probe, straight
Measuring range: –50 °C to +400 °C / tolerance: ± 2.2 °C

3| TP-K05 surface probe, curved
Measuring range: –50 °C to +400 °C / tolerance: ± 2.2 °C

4| TP-K06 room probe
Measuring range: –50 °C to +800 °C / tolerance: ± 2.2 °C

5| TP-K02 immersion probe
Measuring range: –50 °C to +700 °C / tolerance: ± 2.2 °C

1　　2　　3　　4　　5

CASES
Double-pole voltage tester and continuity tester

TESTBOY DISPLAY

Testboy display
Individual arrangement possible (e.g. TB 110,130,140)

TESTBOY 110 PACKAGE

Testboy 110 (in display, 21 pieces) + stand-up display
Non-contact voltage tester from 12 V

| Optical display
| LED torch light function
| Housing made of impact-resistant and unbreakable ABS plastic
| Voltage range 12-1000 V AC
| IEC/EN 61010-1 (DIN VDE 0411)
| 5-year manufacturer's warranty

More product information can be found on page 12

TESTBOY Profi LCD *PLUS* DISPLAY

Testboy Profi LCD *PLUS* (in display, 10 pieces)
Double-pole voltage tester with LCD display

| Indication of DC and AC voltages from 6 V to 10,000 V
| Fuse / RCD test (30 mA) using two buttons
| Ultra-bright LED torch light function (white)
| Easy-to-use click system to adjust the socket dimensions
| Special tips also suitable for WAGO terminals
| Removable 4 mm test tip adapter and GS 38 test attachments
| Optimum single-handed operation
| CAT IV 1000 V as per IEC/EN 61243-3 (DIN VDE 0682-401)
| 5-year manufacturer's warranty

More product information can be found on page 17

TESTBOY Profi LED *PLUS* DISPLAY

Testboy Profi LED *PLUS* (in display, 10 pieces)
Double-pole voltage tester with LED display

| Indication of DC and AC voltages from 6 V to 10,000 V
| Fuse / RCD test (30 mA) using two buttons
| Ultra-bright LED torch light function (white)
| Easy-to-use click system to adjust the socket dimensions
| Special tips also suitable for WAGO terminals
| Removable 4 mm test tip adapter and GS 38 test attachments
| Optimum single-handed operation
| CAT IV 1000 V as per IEC/EN 61243-3 (DIN VDE 0682-401)
| 5-year manufacturer's warranty

More product information can be found on page 16

MARKETING | TESTBOY

TESTBOY Profi LED *PLUS* and
TESTBOY Profi LCD *PLUS* DISPLAY

Testboy Profi LED *PLUS* and TESTBOY Profi LCD *PLUS*
(each with 5 pieces in the display)
Double-pole voltage tester with LED or LCD display

| Indication of DC and AC voltages from 6 V to 1000 V
| Fuse / RCD test (30 mA) using two buttons
| Ultra-bright LED torch light function (white)
| Easy-to-use click system to adjust the socket dimensions
| Special tips also suitable for WAGO® terminals
| Removable 4 mm test tip adapter and GS 38 test attachments
| Optimum single-handed operation
| CAT IV 1000 V as per IEC/EN 61243-3 (DIN VDE 0682-401)
| 5-year manufacturer's warranty

More product information can be found on pages 16 and 17

TESTBOY HIGHLIGHTS
GETTING A GRASP OF TIP TECHNOLOGY

Testboy sales display

Our optimum presentation of instruments for your sales area.
Individual arrangement possible by agreement.
In this example, the display case contains the following products:

| 2 pieces Testboy Profi LED *Plus*
| 2 pieces Testboy Profi LCD *Plus*
| 1 piece Testboy 40 *Plus*
| 2 pieces Testboy 20 *Plus*
| 1 piece Testboy Light 500
| 2 pieces Testboy 3000
| 1 piece Testboy Pocket
| 1 piece Testboy TV 215N
| 1 piece Testboy TV 216N
| 1 piece Testboy 218
| 1 piece Testboy 26
| 1 piece Testboy 110
| 1 piece Testboy 113
| 1 piece Testboy TV 325

THERMOGRAPHY | INFRARED THERMAL IMAGING CAMERAS

Infrared radiation cannot be seen by the naked eye. However, infrared radiation is emitted by any object with a temperature greater than absolute zero (-273.15 °C).

Just about any component that receives or transmits energy actually heats up before failing. Cost-effective energy monitoring systems are therefore of critical importance for establishing the reliability of electrical or mechanical systems.

Infrared thermal imaging is one of the most effective and reliable technologies available for preventative maintenance. It is a quick, thorough and safe process for identifying thermal problems before they become faults.

Infrared cameras can convert infrared radiation into electrical signals, which can be seen by the naked eye. Testboy® infrared cameras feature powerful diagnostics for industrial facilities, industrial processes, switching cabinets, controllers and buildings.

Their reliable analysis of problems and problem sources can help to avoid production outages or fires.
In addition, Testboy® infrared cameras help to improve building quality and save energy.

High-resolution sensors within the Testboy® camera deliver a detailed image evaluation.
This image evaluation can even be carried out on site when using our TV 309, TV 304 and TV 305 models.

Benefits of Testboy infrared cameras
| 3-year manufacturer's warranty
| 50 Hz technology – high-resolution images in real time
| Incl. suitable Testboy® Reporter software
| Incl. in-house training at Testboy
| Service centre at Testboy
| Demonstration models

For more information, demonstrations and training courses, please contact our sales and service team: info@testboy.de
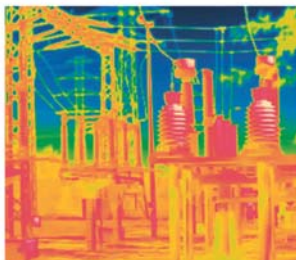
High voltage
Non-contact testing during operation
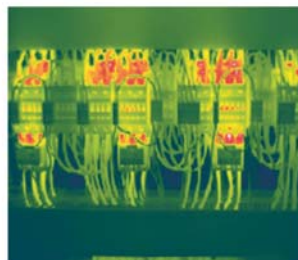
Electrical engineering
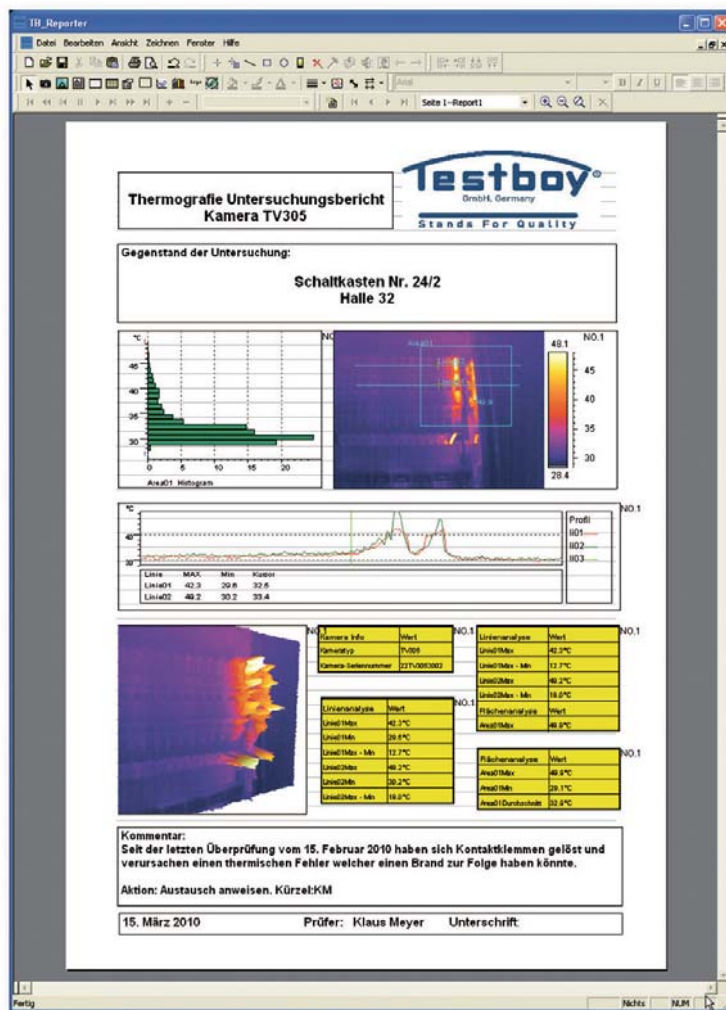Switching cabinet thermal imaging for preventative maintenance

Heating + plumbing
Detection of weak points in real image quality

Industry
Quick processes – only detectable through 50 Hz

TESTBOY® | REPORTER SOFTWARE

Professional creation of reports on infrared and building inspections

The Testboy® Reporter software has been developed by thermal imaging experts and optimised to quickly produce comprehensive and meaningful inspection reports.

This software delivers an efficient rendering for the creation of thermal imaging reports. The look, structure and informational content of the report can be saved individually by the user as a template with the required diagrams, text elements and company logo. The radiometric images transferred to the PC – each pixel has a saved value – can be adjusted later on, for example measuring points and line profiles can be set, and the temperature scale or colour palette can be changed. Calculated evaluations are transferred automatically to the report; the results change automatically when changes are made to the scales.
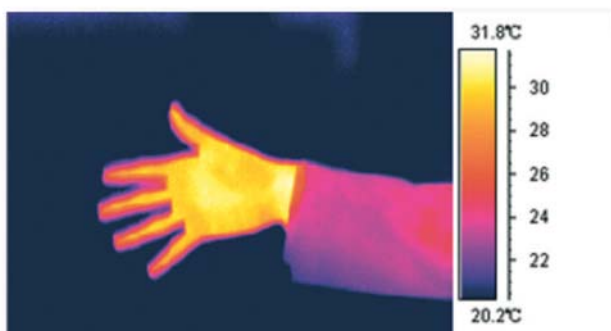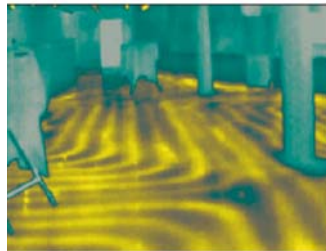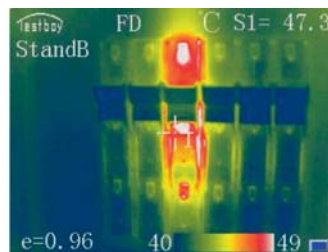

20 Hz

50 Hz

AREAS OF APPLICATION THERMOGRAPHY

Heating and plumbing

Detection of heat or cold sources, e.g. leak detection in the event of pipe breaks, underfloor heating, panel heating, etc.
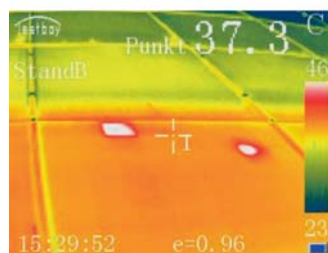

Electrical engineering, electronics

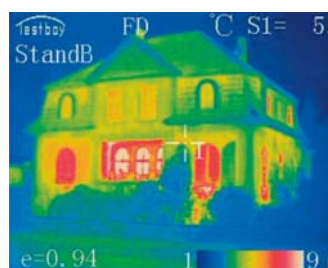Functional monitoring of individual components, e.g. switching cabinet thermal imaging, cable detection

Photovoltaics

Checking of the installed panels, e.g. hotspot, poor contacts, overheating of the inverter


Construction industry, building materials

Building thermal imaging, thermal bridges, checking of insulation, windows, mould, etc.

Measurement and automation technology
Plastics industry, chemical industry, mechanical engineering, etc.
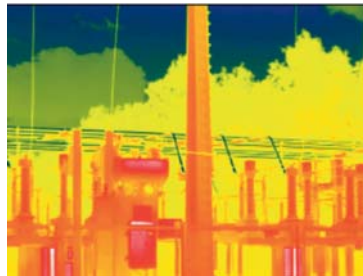
Monitoring of production processes, e.g. heat distribution of injection moulds, non-contact testing of components while the installation is in operation
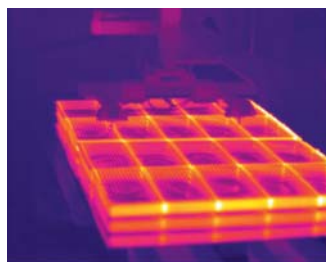
AREAS OF APPLICATION THERMOGRAPHY

Energy technology, power stations
Process monitoring, non-contact testing of
components while the installation is in operation

Medical fields
Human and animal medicine, hidden inflammations,
non-contact examination

Airports
Passenger monitoring, e.g. fever

Fire service
Location of glow nests, person location, gas tank fill
levels, etc.

Infrared thermal imaging is one of the most effective and reliable technologies available for preventative, non-contact and
non-destructive procedures.

Just about any component that receives or transmits energy actually heats up before failing.

High-resolution sensors in the Testboy camera provide a detailed image evaluation. With the Testboy® Reporter software
included in the scope of delivery, a complete evaluation of the images produced can be carried out on the PC, evaluating
each individual pixel.

# THERMOGRAPHY | TESTBOY TV 290 BASIC | Infrared thermal imaging camera

With the cost-effective Testboy TV 290, you can highlight hotspots on a thermal image before a serious incident occurs. With a temperature resolution of 0.12 °C, you will see slight temperature differences on the large LC display, as well as clear images in real time, thanks to a detector capture frequency of 50 Hz. With the light, easy-to-use TV 290, you can measure the temperature of the object you are investigating without any contact. The infrared images saved to 1000 on the camera in JPEG format can then be simply transferred to your PC and analysed with the Testboy® Reporter software included in the scope of delivery.

How you benefit:
| Incl. Testboy® Reporter software
| 50 Hz image capture and playback frequency
| 3-year manufacturer's warranty

Areas of application
| Preventative maintenance – recording of electrical and mechanical problems
| Leak detection and localisation of heating pipes
| Heating / plumbing, e.g. leak detection (underfloor heating, concealed)
| Electrical installation, e.g. switching cabinet thermal imaging
| Maintenance e.g. maintaining engine mounts
| PV installations – location of faulty panels during operation
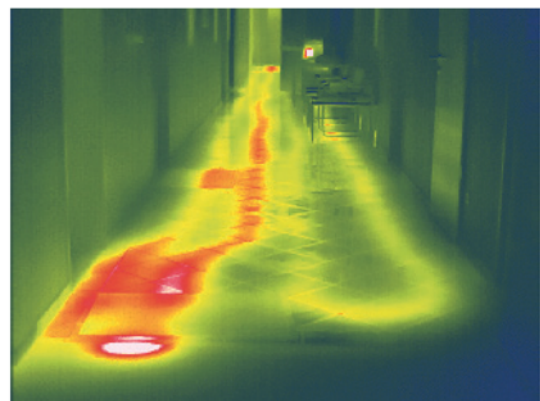
3 YEAR WARRANTY   **50 Hz**   **Incl.** software

TECHNICAL SPECIFICATIONS

Imaging performance	Testboy TV 290 Basic
Sensor type	Focal plane array (FPA), uncooled microbolometer
Resolution	160 × 120 pixels
Pixel size / sensor size	25 µm / 4 mm × 3 mm
Spatial resolution (IFOV)	1.9 mrad
Temperature resolution (NETD)	≤0.1 °C at 30 °C
Field of view (FOV) / min. focus distance	18° × 13° / 0.3 m
Sensor data capture	50 Hz
Spectral range	8 ~ 14 µm
Focus / zoom	Manual / -
Image display	
LC display	2.5" colour LCD
Image frequency	50 Hz
CCD camera	-
Measurement characteristics	
Temperature range	–20 °C ~ +350 °C
Accuracy	±2 °C or ±2 % (the higher value applies)
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)
Moveable measuring point / area / line measurement	1 / 1 / -
Area max-min temp. / area average	1 / 1
Isothermal analysis / temp. differential	1 / -
Alarm (acoustic / optical)	1 / 1
Colour palettes	3
Image settings	Automatic / manual (enhancement and brightness)
Ambient temperature influence	Automatic correction according to user entry
Correction of atmospheric radiation	-
Other settings	Date, time, temperature unit, language
Image storage	
Storage medium	Internal flash memory for up to 1000 images
Storage	Manual single image storage
Data format	JPEG, with 14 bit thermal measurement
Voice annotations	-
Power supply	
Battery operation / ext. power supply	Yes / -
Battery type	Li-Ion battery, rechargeable
Battery life	Up to 3 hours of uninterrupted operation
Charging system	Intelligent charger
Energy-saving function	Automatic power-off / sleep mode (adjustable)
Interfaces	
Video output / audio output	- / -
USB interface	Yes
Other interfaces	-
Environmental conditions	
Operating temperature	–15 °C ~ +50 °C
Storage temperature	–25 °C ~ +60 °C
Humidity	≤90 % non-condensing
Physical properties	
Dimensions (LxHxW)	270 mm × 100 mm × 72 mm
Weight (excl. battery)	600 g
Tripod attachment	¼"-20
Laser pointer	Class 2, 1 mW / 635 nm (red)
Accessories	
Supplied accessories	Transportation case, 1 Li-Ion battery, 1 charger with mains adapter, USB cable, lens cover, operating instructions, "Testboy® Reporter" analysis and evaluation software on CD
Optional accessories	Replacement Li- Ion battery, light shield

THERMOGRAPHY | TESTBOY TV 290 CONTROL | Infrared thermal imaging camera

The Testboy TV 290 Control is a user-friendly 50 Hz monitoring infrared camera. The Testboy TV 290 Control is an infrared camera especially for the airport sector. It provides quick, safe and easy temperature increases (e.g. fever).

How you benefit:
| Incl. Testboy® Reporter software
| 50 Hz image capture and playback frequency
| Alarm function
| 3-year manufacturer's warranty

Large-area scanning
From a distance, larger groups are scanned thermally in real time to detect unusual body temperatures.

Non-contact monitoring
The temperature is measured without contact for protection purposes to prevent any possible infection.

Video output
The TV 290 Control has a video output. For better control, the camera can be connected to a monitor.

Power supply
In addition to the two batteries supplied (in each case with 3 hours' life), the TV 290 Control can also be connected to an external power supply (230 V) for continuous operation.

Auto alarm function
Even slightly increased body temperatures are indicated immediately by the optical and acoustic alarm. This occurs automatically without specifically adjusting the focussing.

3 YEAR WARRANTY   **50 Hz**   **Incl. software**

TECHNICAL SPECIFICATIONS

Imaging performance	TV 290 Control
Sensor type	Focal plane array (FPA), uncooled microbolometer
Resolution	160 × 120 pixels
Pixel size / sensor size	25 µm / 4 mm × 3 mm
Spatial resolution (IFOV)	1.9 mrad
Temperature resolution (NETD)	≤0.1 °C at 30 °C
Field of view (FOV) / min. focus distance	18° × 13° / 0.3 m
Sensor data capture	50 Hz
Spectral range	8 ~ 14 µm
Focus / zoom	Manual / 2× electronic
Image display	
LC display	2.5" colour LCD
Image frequency	50 Hz / 60 Hz
CCD camera	-
Measurement characteristics	
Temperature range	–20 °C ~ +50 °C
Accuracy	± 1 °C
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)
Moving measuring point / measuring area / line measurement	4 / 3 / √
Areas max–min temp. / areas average	√ / √
Isothermal analysis / temp. differential	√ / √
Alarm (acoustic / optical)	√ / √
Colour palettes	11
Image settings	Automatic / manual (enhancement and brightness)
Ambient temperature influence	Automatic correction according to user entry
Correction of atmospheric radiation	Automatic correction according to user entry
Other settings	Date, time, temperature unit, language
Image storage	
Storage medium	Internal flash memory for up to 2000 images
Storage	Automatic / manual single image storage
Data format	JPEG, with 14 bit thermal measurement data
Voice annotations	Up to 40 seconds per image
Power supply	
Battery operation / ext. power supply	Yes / yes (10-15 V DC)
Battery type	Li-Ion battery, rechargeable
Battery life	Up to 3 hours of uninterrupted operation per battery
Charging system	Intelligent charger
Energy-saving function	Automatic power-off / sleep mode (adjustable)
Interfaces	
Video output / audio output	PAL / NTSC / yes
USB interface	Yes
Other interfaces	-
Environmental conditions	
Operating temperature	–15 °C ~ +50 °C
Storage temperature	–25 °C ~ +60 °C
Humidity	≤90 % non-condensing
Physical properties	
Dimensions (LxHxW)	270 mm × 100 mm × 72 mm
Weight (excl. battery)	600 g
Tripod attachment	¼"-20
Laser pointer	Class 2, 1 mW / 635 nm (red)
Accessories	
Supplied accessories	Transportation case, 1 Li-Ion batteries (2x), charger with mains adapter, USB cable, lens cover, light shield, earphones, audio and video cable, operating instructions, "Testboy® Reporter" analysis and evaluation software on CD

# THERMOGRAPHY | TESTBOY TV 303 | Infrared thermal imaging camera

The TV 303 is a universally applicable, cost-effective infrared camera. It is used to find air ingress points, thermal bridges, leaks and damp spots in order to minimise repair costs. With the TV 303, you can highlight hotspots on a thermal image even before a serious incident occurs. The temperature resolution of 0.10 °C and the large LC display allow you to see the smallest of temperature variances and clear images in real time thanks to the detector capture frequency of 50 Hz. The wide-angle lens included in the scope of delivery enables you to choose from various fields of view.

How you benefit:

| Incl. wide-angle (extended field of view)
| Testboy® Reporter software
| 50 Hz image capture and playback frequency
| 3-year manufacturer's warranty

Areas of application

| Preventative maintenance – recording of electrical and mechanical problems
| Leak detection and localisation of heating pipes
| Building thermal imaging
| Heating / plumbing, e.g. leak detection (underfloor heating, concealed)
| Electrical installation, e.g. switching cabinet thermal imaging
| Maintenance e.g. maintaining engine mounts
| PV installations – location of faulty panels during operation
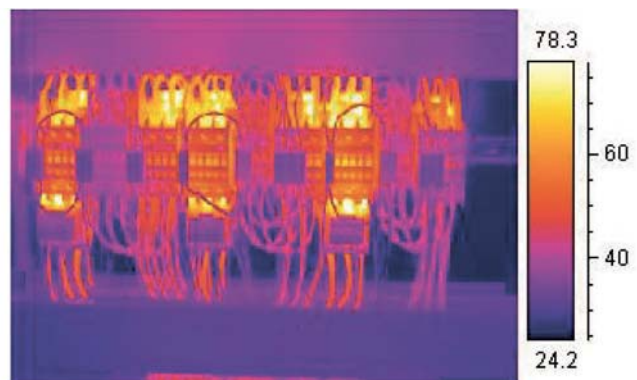
3 YEAR WARRANTY   **50 Hz**   **Incl. software**   **Incl. wide-angle**

TECHNICAL SPECIFICATIONS

Imaging performance	TV 303
Sensor type	Focal plane array (FPA), uncooled microbolometer
Resolution	160 × 120 pixels
Pixel size / sensor size	25 μm / 4.0mm × 3.0mm
Spatial resolution (IFOV)	1.9 mrad
Temperature resolution (NETD)	≤0.10 °C at 30 °C
Field of view (FOV) / min. focus distance	18° × 13° / 0.3 m
Sensor data capture	50 Hz
Spectral range	8 ~ 14 μm
Focus / zoom	Manual / 2× electronic
Image display	
LC display	2.5" colour LCD
Image frequency	50 Hz
CCD camera	-
Measurement characteristics	
Temperature range	-20 °C ~ +350 °C (optional up to +600 °C)
Accuracy	±2 °C or ±2 % (the higher value applies)
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)
Moving measuring point / measuring area / line measurement	4 / 3 / √
Areas max-min temp. / areas average	√ / √
Isothermal analysis / temp. differential	√ / √
Alarm (acoustic / optical)	√ / √
Colour palettes	11
Image settings	Automatic / manual (enhancement and brightness)
Ambient temperature influence	Automatic correction according to user entry
Correction of atmospheric radiation	Automatic correction according to user entry
Other settings	Date, time, temperature unit, language
Image storage	
Storage medium	Internal flash memory for up to 2000 images
Storage	Automatic / manual single image storage
Data format	JPEG, with 14 bit thermal measurement data
Voice annotations	Up to 40 s per image
Power supply	
Battery operation / ext. power supply	Yes / yes (10-15 V DC)
Battery type	Li-Ion battery, rechargeable
Battery life	Up to 3 hours of uninterrupted operation per battery
Charging system	Intelligent charger
Energy-saving function	Automatic power-off / sleep mode (adjustable)
Interfaces	
Video output / audio output	PAL / NTSC / YES
USB interface	Yes
Other interfaces	External power supply
Environmental conditions	
Operating temperature	-15 °C ~ +50 °C
Storage temperature	-25 °C ~ +60 °C
Humidity	≤90 % non-condensing
Physical properties	
Dimensions (LxHxW)	270 mm × 100 mm × 72 mm
Weight (excl. battery)	600 g
Tripod attachment	¼"-20
Laser pointer	Class 2, 1 mW / 635 nm (red)
Accessories	
Supplied accessories	Transportation case, 2 Li-Ion batteries, charger with mains adapter, USB cable, lens cover, light shield, "Testboy® Reporter" analysis and evaluation software on CD, wide-angle lens 7.5 mm (0.5x)
Optional accessories	Car charging adapter, telephoto lens

THERMOGRAPHY | TESTBOY TV 308 | TESTBOY TV 309 | Infrared thermal imaging camera

The Testboy TV 308, TV 309 is a user-friendly infrared camera. The swivelling 2.8" display allows you to take images from any position. The high image data capture and playback frequency of 50 Hz give you clear images in real time. Even fast movements in running processes can be captured with thermal imaging. The innovative image-to-image function with digital panoramic view simplifies the sorting of thermographic images during later evaluation. The wide-angle lens included in the scope of delivery enables you to extend the field of view of the objective lens. Integrated analysis functions, the acoustic and optical alarm and the isothermal analysis also supplement your pictures. The devices are compact and weigh just 700 g. The saved measurement results can be transferred to the PC and analysed using the Testboy® Reporter software. You can operate the camera with one hand thanks to its easy-to-understand operating panel and clearly structured menus.
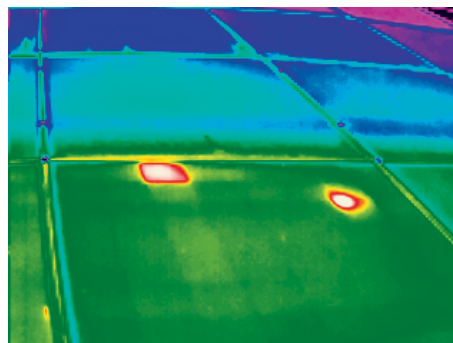
You can carry out analysis on site with the TV309 thanks to its up to four moveable measuring points, up to three moveable measuring areas and the line measurement. Up to 4,000 images can be stored with individual voice annotations on the SD card included in the scope of delivery

How you benefit:
| Incl. wide-angle lens (extended field of view)
| Incl. digital camera (panoramic view)
| Swivelling display
| Voice recording
| On-site analysis
| Alarm function
| 50 Hz image capture and playback frequency
| Incl. Testboy® Reporter software

Areas of application
| Preventative maintenance – recording of electrical and
  mechanical problems
| Leak detection and localisation of heating pipes
| Building thermal imaging
| Process monitoring – observation in real time during operation
| Heating / plumbing, electrical installation
| Maintenance
| PV installations – location of faulty panels during operation

| 3 YEAR WARRANTY | 50 Hz | Incl. software | Incl. wide-angle |

Imaging performance	TV 308	TV 309
Sensor type	Focal plane array (FPA), uncooled microbolometer	
Resolution	160 × 120 pixels	
Pixel size / sensor size	25 µm / 4 mm × 3 mm	
Spatial resolution (IFOV)	1.3 mrad	
Temperature resolution (NETD)	≤0.1 °C at 30 °C	
Field of view (FOV) / min. focus distance	12° × 9° / 0.3 m	
Sensor data capture	50 Hz	
Spectral range	8 ~ 14 µm	
Focus / zoom	Manual / -	Manual / 2× electronic
Image display		
LC display	2.8" colour LCD, swivelling	
Image frequency	50 Hz / 60 Hz	
CCD camera	Yes (300,000 pixels, panoramic view)	
Measurement characteristics		
Temperature range	-20 °C ~ +350 °C	-20 °C ~ +350 °C (optional up to +600 °C)
Accuracy	±2 °C or ±2 % (the higher value applies)	
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)	
Moveable measuring point / area / line measurement	1 / 1 / -	4 / 3 / √
Areas max-min temp. / areas average	√ / √	
Isothermal analysis / temp. differential	√ / -	√ / √
Alarm (acoustic / optical)	√ / √	
Colour palettes	3	11
Image settings	Automatic / manual (enhancement and brightness)	
Ambient temperature influence	Automatic correction according to user entry	
Correction of atmospheric radiation	-	Automatic correction according to user entry
Other settings	Date, time, temperature unit, language	
Image storage		
Storage medium	Internal flash memory for up to 1000 images	Internal flash memory, SD card (1 GB) for up to 4000 images
Storage	Manual single image storage	Automatic / manual single image storage
Data format	JPEG, with 14 bit thermal measurement data	
Voice annotations	-	Up to 40 seconds per image
Power supply		
Battery operation / ext. power supply	Yes / yes (10-15 V DC)	
Battery type	Li-Ion battery, rechargeable	
Battery life	Up to 3 hours of uninterrupted operation per battery	
Charging system	Intelligent charger	
Energy-saving function	Automatic power-off / sleep mode (adjustable)	
Interfaces		
Video output / audio output	- / -	PAL / NTSC / yes
USB interface	Yes	
Other interfaces	Ext. Power supply	External Power supply, SD card slot
Environmental conditions		
Operating temperature	-15 °C ~ +50 °C	
Storage temperature	-25 °C ~ +60 °C	
Humidity	≤90 % non-condensing	
Physical properties		
Housing colour	Red	Silver
Dimensions (LxHxW)	197mm × 178mm × 73mm	
Weight (excl. battery)	700 g	
Laser pointer	Class 2, 1 mW / 635 nm (red)	
Accessories		
Supplied accessories	Transportation case, 2 Li-Ion-batteries, charger with mains adapter, USB cable, lens cover, wide-angle lens (0.5x), operating instructions, "Testboy®-Reporter" analysis and evaluation software on CD	Also: SD card, earphones, audio and video cables
Optional accessories	Car charging adapter, telephoto lens	

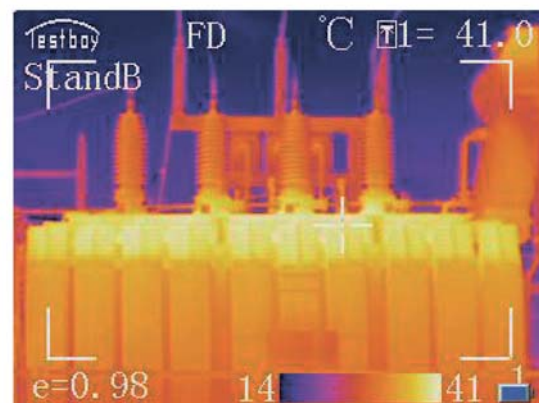# THERMOGRAPHY | TESTBOY TV 304 | Infrared thermal imaging camera

Are you looking for a handy yet powerful thermal imaging camera with excellent image quality? Then the Testboy TV 304 is right for you. It features 384 × 288 pixel resolution and a thermal sensitivity of ≤0.06 °C (NETD). With more than 110,000 pixels, even the tiniest detail in the building shell can be detected with thermal imaging. The detector's 50 Hz data capture allows temperatures of up to 500 °C to be displayed in real time on the 2.8-inch display. Up to four moveable measuring points, up to three moveable measuring areas and a line measurement enable analysis to be carried out on site.

How you benefit:
| Incl. Testboy® Reporter software
| Voice recording
| Alarm function
| 50 Hz image capture and playback frequency
| 3-year manufacturer's warranty

Areas of application
| Preventative maintenance – recording of electrical and mechanical problems
| Leak detection and localisation of heating pipes
| Building thermal imaging
| Energy consulting and building physics
| Energy supply companies – real-time analysis of transformer stations, trunk lines and installations
| Process monitoring – observation in real time for efficient and safe operation
| Research and development
| Electronics design – PCB analysis from a short distance
| Heating / plumbing
| Maintenance
| Energy supply companies
| Industry – production processes, installation technology

3 YEAR WARRANTY   **50 Hz**   **Incl. software**

TECHNICAL SPECIFICATIONS

Imaging performance	TV 304 – 20	TV 304 – 40	TV 304 – 75
Sensor type	Focal plane array (FPA), uncooled microbolometer		
Resolution	384 × 288 pixels		
Pixel size / sensor size	35 µm / 13.4 mm × 10.1 mm		
Spatial resolution (IFOV)	1.75 mrad	0.88 mrad	0.47 mrad
Temperature resolution (NETD)	≤0.06 °C at 30 °C	≤0.06 °C at 30 °C	≤0.06 °C up to 30 °C
Field of view (FOV) / min. focus distance	38° × 28° / 0.5 m	16° × 12° / 0.5 m	8.6° × 6.4° / 0.5 m
Focal length	20 mm	40 mm	75 mm
Sensor data capture	50 Hz		
Spectral range	8 ~ 14 µm		
Focus / zoom	Manual / 2× electronic		
Image display			
LC display	2.8" colour LCD		
Image frequency	50 Hz / 60 Hz		
CCD camera	–		
Measurement characteristics			
Temperature range	-20 °C ~ +350 °C (optional up to +600 °C)		
Accuracy	± 2 °C or ± 2 % (the higher value applies)		
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)		
Moveable measuring point / area / line measurement	4 / 3 /		
Areas max-min temp. / areas average	√ / √		
Isothermal analysis / temp. differential	√ / √		
Alarm (acoustic / optical)	√ / √		
Colour palettes	11		
Image settings	Automatic / manual (enhancement and brightness)		
Ambient temperature influence	Automatic correction according to user entry		
Correction of atmospheric radiation	Automatic correction according to user entry		
Other settings	Date, time, temperature unit, language		
Image storage			
Storage medium	Internal flash memory, SD card for up to 4000 images		
Storage	Automatic / manual single image storage		
Data format	JPEG, with 14 bit thermal measurement data		
Voice annotations	Up to 40 seconds per image		
Power supply			
Battery operation / ext. power supply	Yes / yes (10-15 V DC)		
Battery type	Li-Ion battery, rechargeable		
Battery life	Up to 3 hours of uninterrupted operation per battery		
Charging system	Intelligent charger		
Energy-saving function	Automatic power-off / sleep mode (adjustable)		
Interfaces			
Video output / audio output	PAL / NTSC / yes		
USB interface	Yes		
Other interfaces	Ext. Power supply, SD card slot		
Environmental conditions			
Operating temperature	-15 °C ~ +50 °C		
Storage temperature	-25 °C ~ +60 °C		
Humidity	≤90 % non-condensing		
Physical properties			
Dimensions (LxHxW)	310mm × 127mm × 90mm		
Weight (excl. battery)	910 g		
Tripod attachment	¼"-20		
Laser pointer	Class 2, 1 mW / 635 nm (red)		
Accessories			
Supplied accessories	Transportation case, 2 Li-Ion batteries, charger with mains adapter, USB cable, lens cover, SD card, light shield, earphones, audio and video cables, operating instructions, "Testboy® Reporter" analysis and evaluation software on CD		
Optional accessories	Car charging adapter, wide-angle lens		

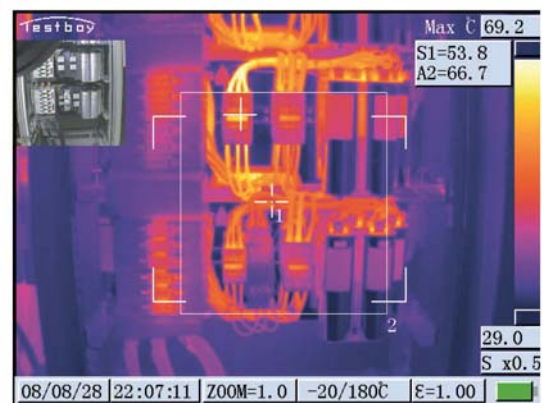# THERMOGRAPHY | TESTBOY TV 305 | Infrared thermal imaging camera

The Testboy TV 305 is a great choice. With its 384 × 288 pixels and outstanding thermal sensitivity (≤0.06 °C NETD), it offers optimum resolution and image quality. Moreover, the detector's 50 Hz capture frequency allows temperatures to be displayed in real time on the large 4-inch display. The TV 305 also features an innovative image-in-image function. This technology captures both a thermal image and a real image. The TV 305 helps you to identify suspicious components more quickly and incorporate the information in a report, enabling repairs to be carried out quickly and effectively.

How you benefit:
| Image-in-image function
| On-site analysis
| 50 Hz image capture and playback frequency
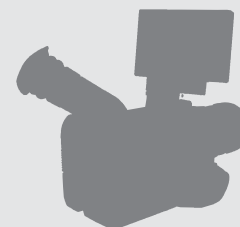| 3-year manufacturer's warranty

Areas of application
| Preventative maintenance – recording of electrical and mechanical problems
| Energy supply companies – real-time analysis of transformer stations, trunk lines and installations
| Process monitoring – observation in real time for efficient and safe operation
| Research and development
| Electronics design – PCB analysis from a short distance

3 YEAR WARRANTY **50 Hz** **Incl. software**

TECHNICAL SPECIFICATIONS

Imaging performance	TV 305
Sensor type	Focal plane array (FPA), uncooled microbolometer
Resolution	384 × 288 pixels
Pixel size / sensor size	45 µm / 14.4 mm × 10.8 mm
Spatial resolution (IFOV)	0.88 mrad
Temperature resolution (NETD)	≤0.06 °C at 30 °C
Field of view (FOV) / min. focus distance	16° × 12° / 0.5m
Sensor data capture	50 Hz
Spectral range	8 ~ 14 µm
Focus / zoom	Automatic, manual / 1-8 × electronic
Image display	
LC display	4" colour LCD (640 × 480 pixels)
Image frequency	50 Hz / 60 Hz
CCD camera	Yes (300,000 pixels, image-in-image, full image)
Measurement characteristics	
Temperature range	–20 °C ~ +600 °C (optional up to +1200 °C)
Accuracy	±2 °C or ±2 % (the higher value applies)
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)
Moving measuring point / measuring area / line measurement	10 / 5 / √
Areas max–min temp. / areas average	√ / √
Isothermal analysis / temp. differential	√ / √
Alarm (acoustic / optical)	√ / √
Colour palettes	9
Image settings	Automatic / manual (enhancement and brightness)
Ambient temperature influence	Automatic correction according to user entry
Correction of atmospheric radiation	Automatic correction according to user entry
Other settings	Date, time, temperature unit, language
Image storage	
Storage medium	Internal flash memory, CF card for up to 4000 images
Storage	Automatic / manual single image storage
Data format	JPEG, with 14 bit thermal measurement data
Voice annotations	Up to 40 seconds per image
Power supply	
Battery operation / ext. power supply	Yes / yes (10-15 V DC)
Battery type	Li-Ion battery, rechargeable
Battery life	Up to 2 hours of uninterrupted operation per battery
Charging system	Intelligent charger
Energy-saving function	Automatic power-off / sleep mode (adjustable)
Interfaces	
Video output / audio output	PAL / NTSC; VGA / yes
USB interface	Yes
Other interfaces	–
Environmental conditions	
Operating temperature	–15 °C ~ +50 °C
Storage temperature	–25 °C ~ +60 °C
Humidity	≤90 % non-condensing
Physical properties	
Dimensions (LxHxW)	305mm × 130mm × 135mm
Weight (excl. battery)	1690 g
Tripod attachment	¼"-20
Laser pointer	Class 2, 1 mW / 635 nm (red)
Accessories	
Supplied accessories	Transportation case, 2 Li-Ion batteries, external LC display, charger with mains adapter, CF card with card reader, USB cable, lens cover, earphones, audio and video cables, operating instructions, "Testboy® Reporter" analysis and evaluation software on CD
Optional accessories	Wide-angle lens 20 mm (0.5x), telephoto lens 80 mm (2x)

# THERMOGRAPHY | TESTBOY TV 306 | Infrared thermal imaging network camera

The TV 306 is a high-quality infrared camera with temperature measurement functions suitable for industrial automation applications and fixed installations. Our infrared technology allows you to conveniently capture thermal information
about product quality and force influences during the production run. However, thermal imaging cameras are also used for research and development during product design or in the laboratory. The temperature measurement system of the TV 306 is professional and accurate. This camera is the perfect choice for stationary applications and automation tasks for which non-contact high-resolution temperature measurements are required. The TV 306 allows you to detect fine temperature differences of just 0.06 °C within a range of -20 °C to +500 °C. The camera produces precise infrared images in a high resolution and has an image refresh rate of 50 Hz (real time). Each TV 306 can be assigned an individual network address. It can then be integrated quickly and easily into your existing control systems. An alarm can be set to automatically trigger if the temperature exceeds or falls below specified value. The TV 306 can also be used in hard-to-reach spots thanks to its compact light design. The auto-focus feature guarantees you'll get a sharp infrared image. Simply connect the camera to a PC and you'll see the high-quality real-time images. A PC can be used to completely control the camera and auto-focus.

How you benefit:
| 50 Hz image capture and playback frequency
| Thermographic video recording
| Network camera incl. network software
| Incl. Testboy® Reporter software
| 3-year manufacturer's warranty

Areas of application
| Process monitoring – observation in real time for
  efficient and safe operation
| Research and development
| Automation applications
| Object monitoring
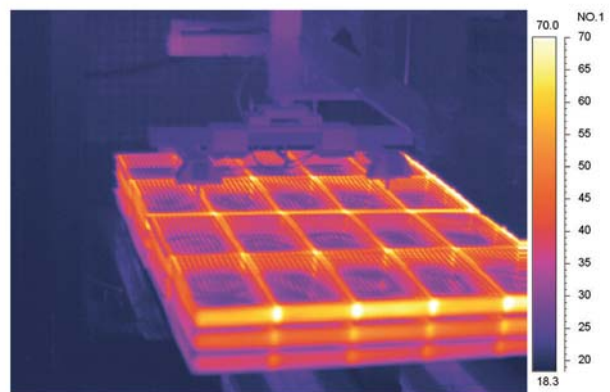
3 YEAR WARRANTY

50 Hz

Incl. software

TECHNICAL SPECIFICATIONS

Imaging performance	TV 306 – 160	TV 306 – 384
Sensor type	Focal plane array (FPA), uncooled microbolometer	
Resolution	160 × 120 pixels	384 × 288 pixels
Pixel size / sensor size	35 μm / 5.6 mm × 4.2 mm	35 μm / 13.4 mm × 10.0 mm
Spatial resolution (IFOV)	1.9 mrad	≤0.88 mrad
Temperature resolution (NETD)	0.1 °C to 30 °C	≤0.06 °C at 30 °C
Field of view (FOV) / min. focus distance	18° × 13° / 0.3 m	16° × 12° / 0.5 m
Sensor data capture	50 Hz	
Spectral range	8 ~ 14 μm	
Focus	Manual	Automatic, manual
Measurement characteristics		
Temperature range	–20 °C ~ +350 °C, (optional up to +600 °C)	–20 °C ~ +180 °C (optional up to 600 °C)
Accuracy	±2 °C or ±2 % (the higher value applies)	
Emissivity correction	Variable from 0.1 to 1.0 (in 0.01 increments)	
Moving measuring point / measur. area / line measur.	4 / 3 / √	
Areas max-min temp. / areas average	√ / √	
Isothermal analysis / temp. differential	√ / √	
Alarm (acoustic / optical)	√ / √	
Colour palettes	11	
Image settings	Automatic / manual (enhancement and brightness)	
Correction of atmospheric radiation	Automatic correction according to user entry	
Other settings	Temperature unit, language, IP address	
Image storage		
Storage medium	–	
Storage	Single frames, linear or interval collection with time adjustment from PC, up to 200 frames	
Data format	Single image storage -. BMP; digital video – MPEG – 4	
Voice annotations	–	
Power supply		
External power supply	Yes (10 – 15 V DC; ≤6 W)	
Energy-saving function	Automatic power-off / sleep mode (adjustable)	
Interfaces		
Video output / audio output	PAL / NTSC / -	
USB interface	–	
Other interfaces	RJ-45 ethernet interface, RS485 remote interface	
Environmental conditions		
Operating temperature	–15 °C ~ +50 °C	
Storage temperature	–25 °C ~ +60 °C	
Humidity	≤90 % non-condensing	
Physical properties		
Dimensions (L × H × W)	242 mm × 92 mm × 107 mm	260 mm × 92 mm × 107 mm
Weight	790 g (plus lens)	
Tripod attachment	¼"-20	
Laser pointer	–	
Accessories		
Supplied accessories	Transportation case, lens cover, video cable, LAN cable, operating instructions, analysis and evaluation software on CD	
Optional accessories		Wide-angle lens, telephoto lens

THERMOGRAPHY | TESTBOY TV 500 FireChief | Lifesaving camera

The Testboy TV 500 FireChief has been designed especially for tough fire fighting tasks. It is ready for use in less than 20 seconds and can run continuously for two hours on each rechargeable battery. Whether operating in thick smoke or total darkness, this fully radiometric camera guarantees the fireman a commanding view in any environment, and provides reliable assistance when searching for missing persons or other heat sources. The camera is waterproof and dustproof and has a 3.5" TFT LCD screen that allows you to quickly select from a wide colour palette based on your specific application.
It can be operated with one hand, which eliminates operating errors, even when thick gloves are worn. Whether in a crawl space, overhead or on a ladder, the 1300 g lightweight and compact camera can also be operated easily with just one hand for extended periods.

How you benefit:
| Car charging lead included in the scope of delivery
| Suitable for left and right-handers
| Fall height 1.80 m
| Watertight up to 1 m
| Complies with fire safety standard UL94-VO
  with IP67 classification
| 50 Hz image capture and playback frequency
| 3-year manufacturer's warranty

Areas of application
| Fire service
| Accident rescue
| Life saving
| Glow nest detection
| Searching for missing persons in smoke-filled buildings

TECHNICAL SPECIFICATIONS

| Imaging performance	TV 500 FireChief
Sensor type	Focal plane array (FPA), uncooled microbolometer
Resolution	160 × 120 pixels
Spatial resolution (IFOV)	3.3 mrad
Temperature resolution (NETD)	≤0.08 °C at 30 °C
Field of view (FOV)	30° × 23°
Sensor data capture	50 Hz
Spectral range	8 ~ 14 µm
Focus	Fixed
Startup time	≤20 s at 30 °C up to image output
Image display	
LC display	3.5" TFT LCD, 260,000 colours, 640 × 480 pixels
Measurement characteristics	
Temperature range	–20 °C ~ +600 °C
Measurement function	Fixed measuring point
Measurement correction	0.96 fixed emissivity
Colour palettes	6 (firefighting palette, grey, rainbow, etc.)
Power supply	
Battery type	Ni-MH batteries, rechargeable
Battery life	Up to 2 hours of uninterrupted operation
Charging system	Intelligent charger (charging process ≤2 hours)
Battery charge	Over 500 charge cycles
Environmental conditions	
Long-term operating temperature	–15 °C ~ +50 °C
Short-term operating temperature	+50 °C ~ +260 °C
Storage temperature	–40 °C ~ +70 °C
Protection class	IP67 (watertight up to 1 m)
Flammability rating	UL94-VO
Fall height	1.8 m
Physical properties	
Dimensions (L × H × W)	190 mm × 128 m × 273 mm
Weight	≤1.3 Kg
Accessories	
Supplied accessories	Transportation case, 2 Ni-MH batteries, charger, incl. car charging cable, operating instructions

OVERVIEW | LIGHT & SOUND

As far as the fire detection and burglar alarm industry is concerned, flashing beacons and warning signs are the be all and end all. When a warning needs to be issued in case of fire or a dangerous process needs to be signalled, we offer a large range of devices to cover numerous requirements beginning with the Askari for screwing on to a control panel or for both surface and concealed installation, right through to the Asserta with a volume output level of 120 dB.

A combination of sirens and flashing beacons is also possible. The Flashni is an excellent example in a single device.

Equipped with progressive energy-saving and efficient LED technology, the Solista range continues to be a good economical alternative to the conventional Xenon version!
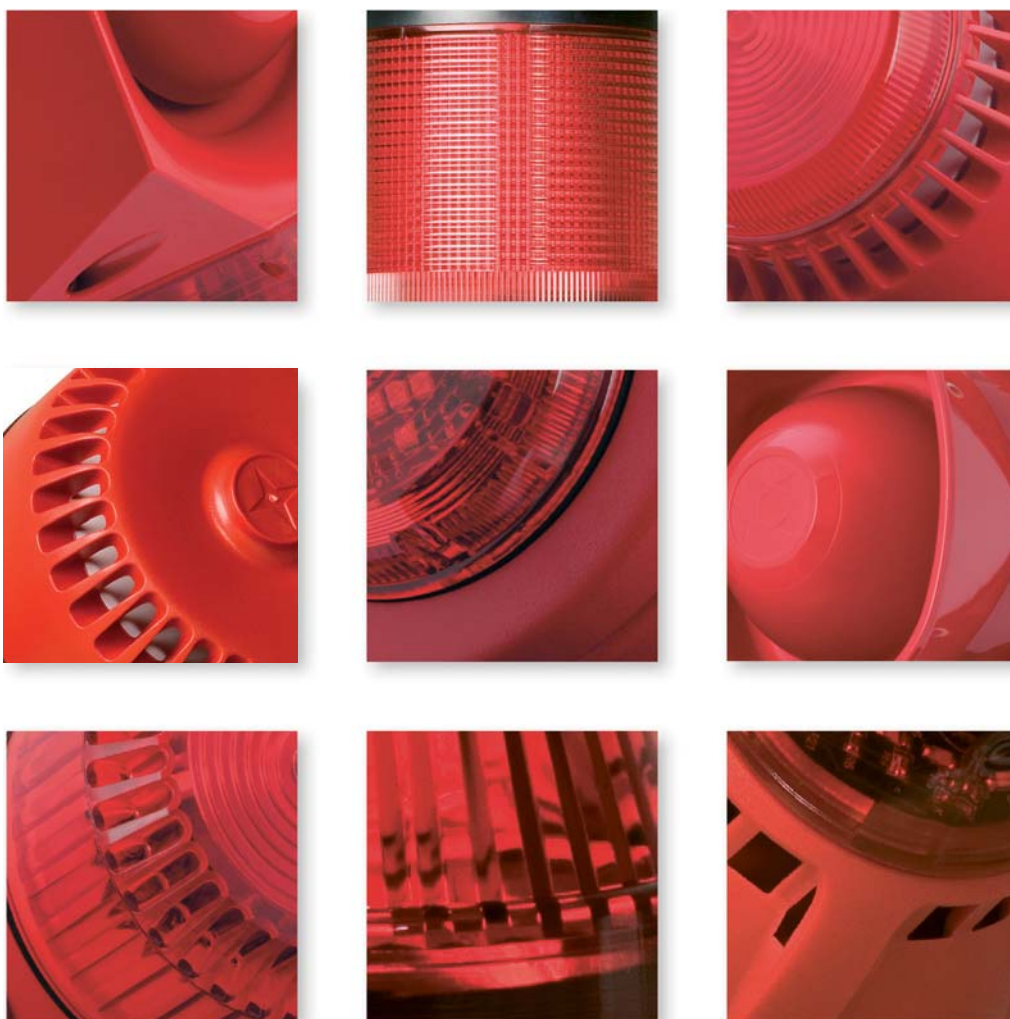
PRODUCTS

1. Asserta AV
2. Signal Towers
3. Flashni
4. Rolp
5. Solista
6. Symphoni Voice Plus
7. Solex
8. Compro BL series
9. Chiasso Razor

LIGHT & SOUND | PSW.90XXX | Piezo siren

The PSW.90XXX Piezo sirens work at an operating voltage of 12 – 110 V DC, and a frequency of approx. 2.8 kHz. Alternatively, a steady tone, a short or long pulse tone can be produced. Its low current consumption, high volume and IP65 protection rating enable the siren to be used both indoors and outdoors.

How you benefit:
| High life
| Low current consumption
| Simple and fast assembly

| No high-frequency disturbance
| Penetrating, harmonic wave sound
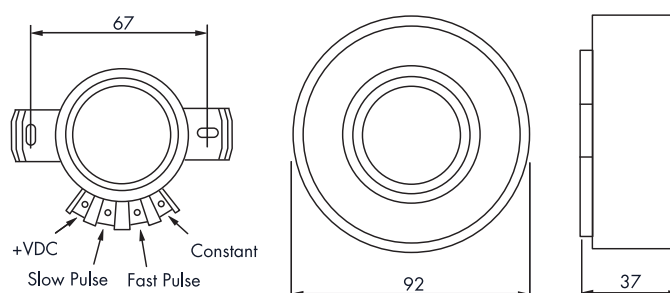
SPECIFICATIONS

| Technical data	PSW.90030	PSW.90080	PSW.90120
SPL	100 ±3 dB	100 ±5 dB	100 ±3 dB
Resonance frequency	2.7 ±0.5 kHz	2.7 ±0.5 kHz	2.9 ±0.5 kHz
Current consumption	<35 mA at 12 V DC	<65 mA at 50 V DC	<35 mA at 110 V DC
Operating voltage	12 V DC	50 V DC	110 V DC
Voltage range	3 ~ 30 V DC	30 ~ 80 V DC	80 ~ 120 V DC
Tone	Constant, short or long pulse		
Operating temperature	–20 °C ~ +70 °C		
Storage temperature	–30 °C ~ +80 °C		
Connection	Terminals		
Housing material	PBT		
Colour	Grey		

LIGHT & SOUND | ASKARI | Piezo siren

The Askari siren was designed for a wide variety of possible applications. All designs in the Askari siren range have 32 different selectable signal tones and adjustable volume. What sets them apart is their low current consumption and high output. Possible uses range from switchboard and instrument panels right through to cable ducts and surface-mounted housings. Their versatile settings enable Askari sirens to be used both as simple warning devices and in fire or burglar alarm systems.

How you benefit:

I Excellent sound output
I Low current consumption
I 32 selectable tones

I Automatic synchronisation
I Volume control
I Second tone for dual-tone alarm
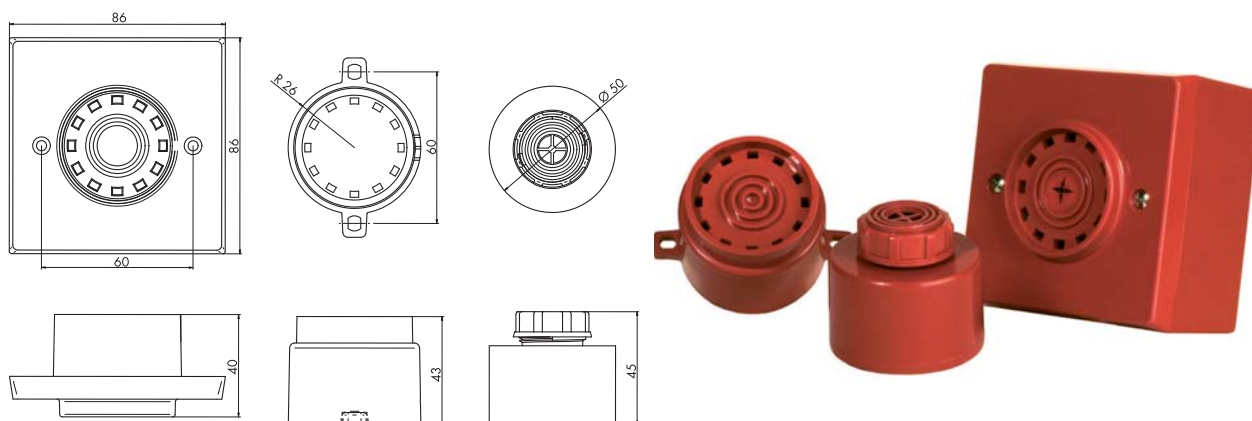
SPECIFICATIONS

Technical data	Askari Compact	Askari Flange	Askari Panel
Signal	Acoustic	Acoustic	Acoustic
Voltage range	9 – 28 V DC	9 – 28 V DC	9 – 28 V DC
Volume	68 – 106 dB(A)	63 – 101 dB(A)	63 – 101 dB(A)
Signal tones	32	32	32
Protection class	IP54 (with backbox)	IP65	IP65
Current consumption	8 – 35 mA, dep. on tone	6 – 35 mA, dep. on tone	5 – 35 mA, dep. on tone
Housing material	ABS	ABS	ABS
Operating temperature	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Approval	VdS, CNPP, CPD	–	–
Dimensions	86 × 86 × 40 mm	ø 60 × 43 mm	ø 50 × 45 mm
Weight	110 g	90 g	95 g
Colour	Red or white	Red or white	Red or white
Scope of delivery	1× operating instructions	1× operating instructions	1× operating instructions

VdS

2 YEAR WARRANTY

LIGHT & SOUND | FLASHNI | Combi-siren

The Flashni combi-siren consists of a siren and an integrated Xenon flashing beacon. Thanks to its IP65 protection rating, the robust Flashni can be used for a wide range of applications. It is suitable for use in fire and burglar alarm technologies, as well as in industrial applications.

How you benefit:

I Excellent sound output
I 32 selectable tones
I Automatic synchronisation

I Volume control
I Combination of different colours
I Suitable for S, D and U-base
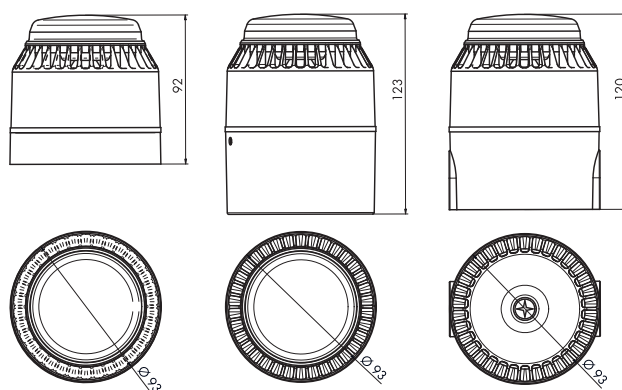
SPECIFICATIONS

Technical data	Flashni 12 V DC	Flashni 24 V DC
Signal	Acoustic / optical	Acoustic / optical
Equipment	S, D or U-base	S, D or U-base
Voltage range	9 – 15 V DC	18 – 28 V DC (*)
Volume	Up to 104 dB(A) depending on signal tone	Up to 110 dB(A) depending on signal tone
Signal tone	32	32
Current consumption	Up to 111 mA depending on signal tone	Up to 85 mA depending on signal tone
Flash power	0.7 joules	0.7 joules
Flash rate	1 HZ +/-20 %	1 HZ +/-20 %
Protection class	S-base IP54; D / U-base IP65	S-base IP54; D / U-base IP65
Housing material	Housing: ABS; lens: PC	Housing: ABS; lens: PC
Operating temperature	-10 °C to +55 °C	-10 °C to +55 °C
Approval	VdS, CPD	VdS, CPD
Dimensions	ø 93 × 92 mm S-base	ø 93 × 92 mm S-base
	ø 93 × 123 mm D / U-base	ø 93 × 121 mm D / U-base
Weight	325 g S-base; 400 g D / U-base	325 g S-base; 400 g D / U-base
Housing colours	White or red	White or red
Lens colour	Red, yellow, blue, green or clear	Red, yellow, blue, green or clear
Scope of delivery	1× operating instructions	1× operating instructions

* 100 up to 230 V AC with powered deep base

VdS

2 YEAR WARRANTY

LIGHT & SOUND | SQUASHNI G3 | Platform siren

The Squashni G3 platform siren's flat design means easy attachment of an additional detector, e.g. smoke or gas detectors or flashing beacons directly on to the base.
This ensures cost-saving installation. 8 different tones can be selected. The VdS approval for fire detection technology (BMT), low current consumption and a flat design make the Squashni G3 ideal for indoor installation.

How you benefit:

❙ Low current consumption
❙ Cover for use as a single siren
❙ Minimum installation costs

❙ Volume control
❙ Assembly platform for detectors
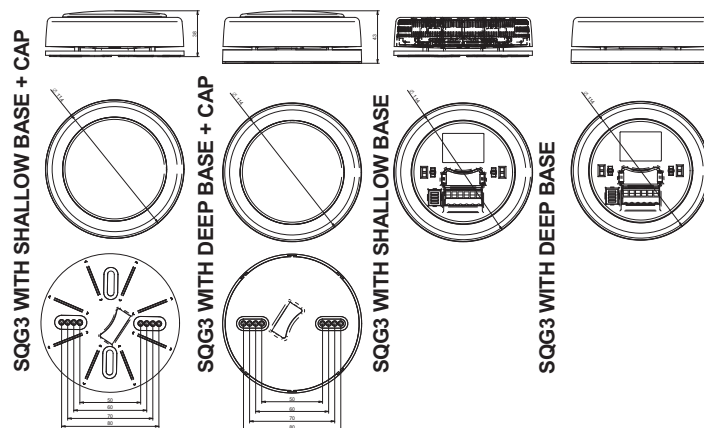
SPECIFICATIONS

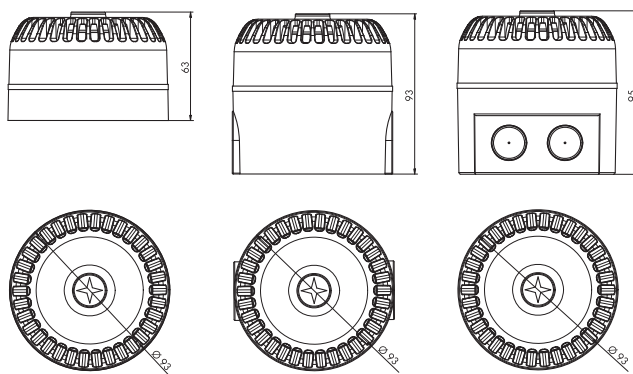| Technical data	Squashni G3	Squashni G3 AV
Signal	Acoustic	Acoustic and optical
Voltage range	18 – 28 V DC	18 – 28 V DC
Volume	80 – 90 dB(A)	80 – 90 dB(A)
Signal tones	8	8
Flash rate	–	1 Hz
Flash colour / intensity	–	Red / 1 Cd
Current consumption	3 – 5 mA depending on signal tone	7 – 9 mA depending on signal tone
Protection class	IP21C	IP21C
Housing material	ABS	ABS
Operating temperature	-10 °C to +55 °C	-10 °C to +55 °C
Dimensions	ø 114 × 38 mm	ø 114 × 38 mm
Housing colour	White	White
Approval	VdS	VdS
Scope of delivery	1× operating instructions	1× operating instructions

VdS   2 YEAR WARRANTY

LIGHT & SOUND | ROSHNI LOW PROFILE (ROLP) | Electronic siren

The universal ROLP warning tone siren with 32 selectable signal tones, incl. DIN tone, has been developed for fire detection and safety technology in accordance with VdS guidelines. Its robust design, long service life and proven reliability enable universal use in all areas, including industry. What sets this siren apart is low current consumption with optimum efficiency and automatic synchronisation.

How you benefit:
I Excellent sound output
I Low current consumption
I 32 selectable signal tones
I Automatic synchronisation

I Volume control
I Dual-tone alarm
I Suitable for S, D and U-base

SPECIFICATIONS

Technical data	Roshni LP
Equipment	S, D or U-base
Signal	Acoustic
Voltage range	9 – 28 V DC (*)
Volume	64 – 112 dB(A) depending on signal tone
Signal tones	32
Protection class	S-base IP54; D / U-base: IP65
Current consumption	3 – 32 mA depending on signal tone
Housing material	ABS
Operating temperature	-25 °C to – +70 °C
Approval	VdS, LPCB & CNPP, CPD
Dimensions	ø 93 × 63 mm S-base
	ø 93 × 93 mm D / U-base
Weight	280 g S-base
	310 g D / U-base
Housing colours	Red or white
Scope of delivery	1× operating instructions

* 100 up to 230 V AC with powered deep base

VdS

2 YEAR WARRANTY

## LIGHT & SOUND | SYMPHONI | Electronic high–performance siren

The Symphoni High Output electronic high–performance siren has been development especially for areas where high volumes up to 120 dB are required.
Its robust design, dual–tone alarm and high volume make it suitable for a wide range of applications for BMT and industry.

The Symphoni Low Power is also characterised by its low current consumption.

How you benefit:

| Excellent sound output
| Low current consumption (Low Power)
| Selectable signal tones

| Automatic synchronisation
| Volume control
| Dual–tone alarm
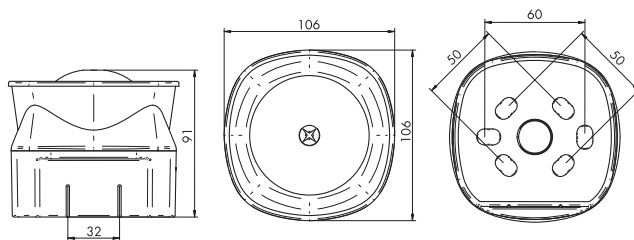
SPECIFICATIONS

Technical data	Symphoni High Output	Symphoni Low Power
Signal	Acoustic	Acoustic
Voltage range	9 – 28 V DC	12 – 30 V DC
Volume	88 – 120 dB (A) dep. on signal tone	100 dB(A) at 24 V DC all signal tones
Signal tones	32	3
Current consumption	190 – 260 mA dep. on signal tone	5 mA at 24 V DC all signal tones
Protection class	IP42 (*)	IP42 (*)
Housing material	ABS	ABS
Operating temperature	–10 °C to +55 °C	–10 °C to +55 °C
Approval	VdS, CPD	VdS, CPD
Dimensions	108 × 108 × 96 mm	108 × 108 × 96 mm
Weight	580 g	210 g
Housing colours	Red or white	Red or white
Scope of delivery	1× operating instructions	1× operating instructions

* IP66 with amplified backbox

120 dB **VdS** **2 YEAR WARRANTY**

LIGHT & SOUND | SOLEX | Xenon flashing beacon Solex

Thanks to their extremely high efficiency and reliability, Xenon flashing beacons are suitable for various areas of application, e.g. for fire and burglar alarm systems and for industry. The special feature of the Solex flashing beacon is the suppression of startup current peaks.

How you benefit:
I Large voltage range, up to 60 V DC
I Startup current limit
I Automatic synchronisation
I Constant output in overall
  voltage range

I Available with sabotage protection
I 5 lens colours
I VdS approval
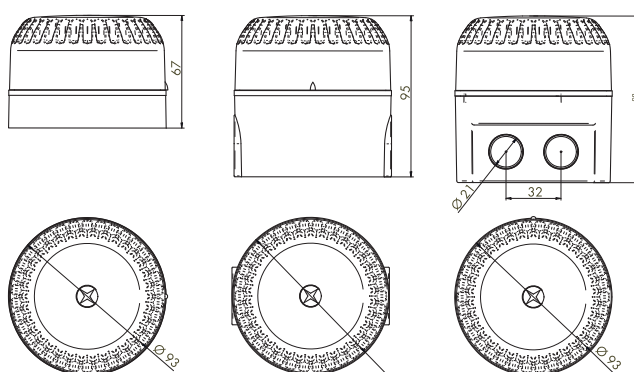
SPECIFICATIONS

Technical data	SOLEX		
Model	Solex 3	Solex 10	Solex 15
Signal	Optical	Optical	Optical
Operating voltage	9 – 60 V DC (*)	9 – 60 V DC (*)	9 – 60 V DC
Current consumption	40 mA at 24 V DC	88 mA at 24 V DC	240 mA at 24 V DC
Light source	Xenon	Xenon	Xenon
Flash power	2.5 Cd	10 Cd	15 Cd
Flash rate	1 Hz + / − 20 %	1 Hz + / − 20 %	1 Hz + / − 20 %
Operating temperature	−25 °C to +70 °C	−25 °C to +70 °C	−25 °C to +70 °C
Protection class	S-base IP54, D / U-base IP65		
Lens colours	Red, yellow, clear, blue or green		
Housing colours	Red, white	Red, white	Red, white
Weight	S-base 150 g, D / U-base 180 g		
Material	Housing: ABS FR; lens: PC		
Approval	VdS	VdS	VdS
Scope of delivery	1× operating instructions		

* 100 up to 230 V AC with powered deep base

VdS

2
YEAR
WARRANTY

LIGHT & SOUND | SYMPHONI VOICE PLUS | Voice siren

The Symphoni Voice Plus was developed as a siren with tone and voice output. What sets them apart is their low current consumption and high output.

How you benefit:
I Large voltage range up to 60 V DC
I Excellent sound output for various applications
I Extremely low current consumption
I Selectable volume
I 8 selectable tones

I Large selection of voice messages for various applications
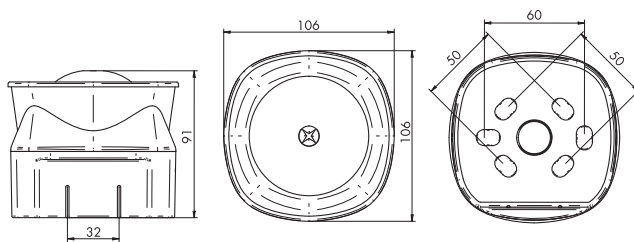
SPECIFICATIONS

| Technical data	Symphoni Voice Plus	Symphoni Voice Plus AV
Signal	Voice siren	Voice siren / flashing beacon
Operating voltage	9 – 60 V DC	9 – 60 V DC
Current consumption	4 – 8 mA at 24 V DC	4 – 8 mA (siren) + 4 mA (flash) at 24 V DC
Volume	Tone: 100 dB(A), voice output: 97 dB(A)	Tone: 100 dB(A), voice output: 97 dB(A)
Volume control	–10 dB(A) (via changing)	–10 dB(A) (via changing)
Messages	Memory space for up to 16 message	Memory space for up to 16 message
Alarm tones	8	8
Flash power	–	2 Cd at 24 V DC
Flash rate	–	1 Hz
Flash colour	–	Red flash
Protection class	IP21C, IP66 with WP base	IP21C, IP66 with WP base
Operating temperature	–10 °C to +55 °C	–10 °C to +55 °C
Housing colours	Red or white	Red or white
Housing material	ABS	ABS, lens: polycarbonate
Scope of delivery	1× operating instructions	1× operating instructions

2
YEAR
WARRANTY

LIGHT & SOUND | ASSERTA | Industrial siren

The Asserta siren has been developed especially for use in industrial environments with high ambient volumes. All models have 42 different universally selectable signal tones. Thanks to its IP66 protection rating, the Asserta can be used for a wide range of applications in tough environmental conditions.

How you benefit:
I High volume
I Protection class IP66
I 42 selectable tones
I Easy installation

I High efficiency
I Three-tone alarm
I Can be combined with suitable
  flashing beacons
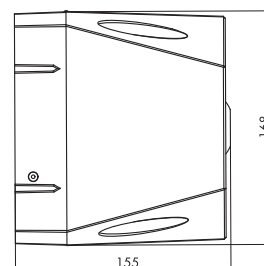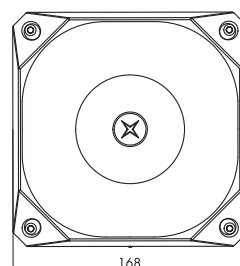
SPECIFICATIONS

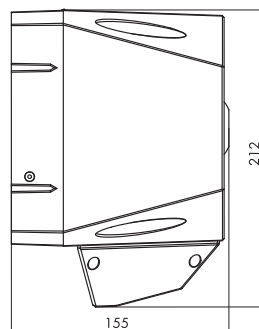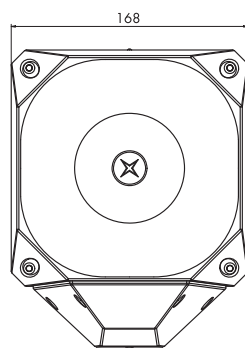| Technical data	Asserta 110, 24 V DC	Asserta 120, 24 V DC	Asserta 110, 230 V AC	Asserta 120, 230 V AC
Signal	Acoustic	Acoustic	Acoustic	Acoustic
Voltage range	18 – 28 V DC	18 – 28 V DC	115 / 230 V AC	115 / 230 V AC
Volume	110 dB(A)	120 dB(A)	110 dB(A)	120 dB(A)
Signal tones	42	42	42	42
Current consumption	35 – 122 mA	100 – 450 mA	40 mA at 230 V AC	65 mA at 230 V AC
Protection class	IP66	IP66	IP66	IP66
Housing material	ABS	ABS	ABS	ABS
Temperature range	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Dimensions	168 × 168 × 155 mm	168 × 168 × 155 mm	168 × 168 × 155 mm	168 × 168 × 155 mm
Weight	1600 g	1600 g	2000 g	2000 g
Housing colours	Red or grey	Red or grey	Red or grey	Red or grey
Approval	CPD	CPD	–	–
Scope of delivery	1× operating instructions	1× operating instructions	1× operating instructions	1× operating instructions

120 dB

2 YEAR WARRANTY

LIGHT & SOUND | ASSERTA AV | Industrial siren with flashing beacon

The Asserta siren has been developed especially for use in industrial environments with high ambient volumes. All models have 42 different universally selectable signal tones. Thanks to its IP66 protection rating, the Asserta can be used for a wide range of applications in tough environmental conditions.

How you benefit:
| High volume
| Protection class IP66
| 42 selectable tones

| High efficiency
| Three-tone alarm
| Easy installation

SPECIFICATIONS

| Technical data	Asserta AV 110, 24 V DC	Asserta AV 120, 24 V DC	Asserta AV 110, 230 V AC	Asserta AV 120, 230 V AC
Signal	Acoustic / optical	Acoustic / optical	Acoustic / optical	Acoustic / optical
Voltage range	18 – 28 V DC	18 – 28 V DC	115 / 230 V AC	115 / 230 V AC
Volume	110 dB(A)	120 dB(A)	110 dB(A)	120 dB(A)
Signal tones	42	42	42	42
Current consumption	320 mA	450 mA	50 mA at 230 V AC	105 mA at 230 V AC
Flash power	3.6 J / 2.0 J	3.6 J / 2.0 J	2.0 J	2.0 J
Flash rate	0.75 / 1 / 1.25 Hz	0.75 / 1 / 1.25 Hz	2 Hz	2 Hz
Protection class	IP66	IP66	IP66	IP66
Housing material	ABS	ABS	ABS	ABS
Lens material	Polycarbonate	Polycarbonate	Polycarbonate	Polycarbonate
Temperature range	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C	-25 °C to +70 °C
Dimensions	168 × 212 × 155 mm	168 × 212 × 155 mm	168 × 212 × 155 mm	168 × 212 × 155 mm
Weight	1800 g	1800 g	2500 g	2500 g
Housing colour	Red or grey	Red or grey	Red or grey	Red or grey
Lens colour	Red, yellow or clear	Red, yellow or clear	Red, yellow or clear	Red, yellow or clear
Approval	CPD	CPD	–	–
Scope of delivery	1× operating instructions	1× operating instructions	1× operating instructions	1× operating instructions

2 YEAR WARRANTY

120 dB

LIGHT & SOUND | SOLISTA MAXI | LED flashing beacon

LED flashing beacons complement fire detection and alarm technology especially wherever high ambient noise levels detract from the acoustic perception of sirens.

How you benefit:
- Low current consumption
- High reliability
- Individual device or as a flash & sound combination
- Compact design
- Suitable for S, D and U-base
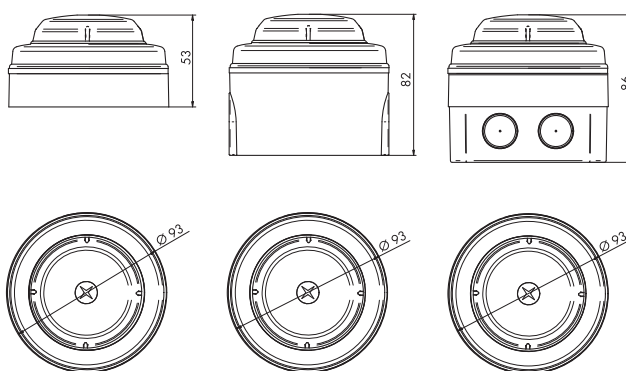
SPECIFICATIONS

| Technical data	SOLISTA Maxi
Model	(stand alone)
Signal	Optical
Voltage range	9 – 60 V DC
Current consumption	3 – 15 mA (adjustable)
Flash rate	0.5 Hz – 1 Hz
Flash intensity	>0.5 Cd at 3 mA (adjustable)
	>1.0 Cd at 6 mA (adjustable)
	>3.0 Cd at 15 mA (adjustable)
Protection class	S-base IP54; D / U-base IP65
Housing material	ABS
Lens material	Polycarbonate
Operating temperature	–10 °C to +55 °C
Dimensions	ø 93 × 53 mm S-base
	ø 93 × 83 mm D / U-base
Weight	100 g
Red housing	Flash: red
White housing	Flash: red, white, green or blue
Lens colour	Red or clear
Scope of delivery	1× operating instructions

VdS

2 YEAR WARRANTY

LIGHT & SOUND | COMPRO BL50, BL70, BL90 | Flashing beacons

The flashing beacons in the BL series are used for a wide range of applications. All models have extremely low current consumption, making them suitable for fire detection systems. These flashing beacons are also
used in industry, for example to draw attention to or warn of an operating status.

How you benefit:

I Robust design
I Protection class IP65
I High efficiency
I LED flashing beacon

I Easy installation
I Underfloor installation or wall mounting
I Steady light, flashing light (other settings on request)
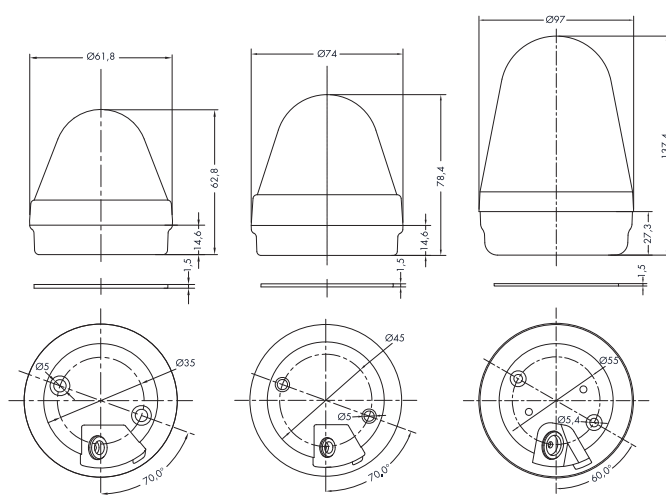
SPECIFICATIONS

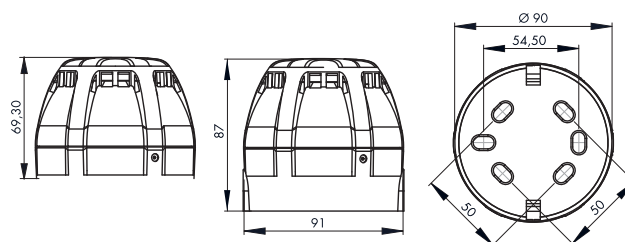| Technical data	Compro BL50	Compro BL70	Compro BL90
Voltage range	24 V AC/DC	24 V AC/DC	24 V AC/DC
Signal	Optical	Optical	Optical
Current consumption	45 mA	65 mA	65 mA
Possible applications	Steady light, flashing light	Steady light, flashing light	Steady light, flashing light
Protection class	IP65	IP65	IP65
Housing material	PC	PC	PC
Operating temperature	–25 °C to +70 °C	–25 °C to +70 °C	–25 °C to +70 °C
Dimensions	ø 61.8 × 62.8 mm	ø 74 × 78.4 mm	ø 97 × 137.4 mm
Weight	68 g	108 g	254 g
Housing colour	Black	Black	Black
Lens colour	Red, yellow, green, blue, clear	Red, yellow, green, blue, clear	Red, yellow, green, blue, clear
Scope of delivery	1× operating instructions	1× operating instructions	1× operating instructions
Dimensions of accessories	Mounting bracket for BL50 ø 54 × 30 mm	Mounting bracket for BL70 ø 65 × 38 mm	Mounting bracket for BL90 ø 79 × 44 mm

2 YEAR WARRANTY

LIGHT & SOUND | CHIASSO I CHIASSO LOW POWER | Electronic siren

The universal CHIASSO warning tone siren with 39 selectable signal tones, incl. DIN tone, has been developed for fire detection and safety technology. Its robust design, long service life and high reliability enable
universal use in all areas, including industry. What sets this siren apart is low current consumption with optimum efficiency and automatic synchronisation.

How you benefit:
I Excellent sound output
I Low current consumption
I Exclusive design
I 39 selectable tones
I Automatic synchronisation

I Dual-tone alarm
I Volume control
I Flexible application options
I VdS approval

SPECIFICATIONS

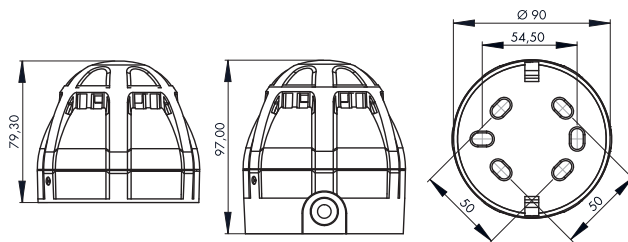| Technical data	Chiasso	Chiasso Low Power
Signal	Acoustic	Acoustic
Voltage range	9 – 28 V DC	9 – 28 V DC
Volume	60 – 120 dB(A) / dep. on signal tone	60 – 100 dB(A)
Signal tones	39	39
Current consumption	9 – 35 mA / dep. on signal tone	4 – 6 mA
Protection class	S-base: IP54; D-base: IP65	S-base: IP54; D-base: IP65
Housing material	ABS FR	ABS FR
Temperature range	-20 °C to +70 °C	-20 °C to +70 °C
Dimensions	ø 91 × 69.30 mm S-base ø 91 × 87 mm D-base	ø 91 × 69.30 mm S-base ø 91 × 87 mm D-base
Weight	212 g S-base; 244 g D-base	212 g S-base; 244 g D-base
Housing colour	Red or white	Red or white
Scope of delivery	1× operating instructions	1× operating instructions

2 YEAR WARRANTY

LIGHT & SOUND | CHIASSO RAZOR | Combi–siren

The Chiasso Razor combi–siren consists of a siren and an integrated LED flashing beacon. Thanks to its IP65 protection rating, the robust Chiasso Razor can be used for a wide range of applications. It is suitable for use in fire and burglar alarm technologies, as well as in industrial applications.

How you benefit:
- Excellent sound output
- Low current consumption
- Exclusive design
- 39 selectable tones
- Automatic synchronisation

- Dual-tone alarm
- Volume control
- Flexible application options
- LED technology
- VdS approval

SPECIFICATIONS

| Technical data	Chiasso Razor
Equipment	S or D-base
Signal	Acoustic / optical
Voltage range	9 – 28 V DC
Volume	67 – 100 dB(A) / depending on signal tone
Signal tones	39
Protection class	S-base: IP54; D-base: IP65
Current consumption	Max. 40 mA / depending on signal tone
Housing material	Housing: ABS FR; lens: PC
Operating temperature	-20 °C to +70 °C
Dimensions	ø 90 × 79.30 mm S-base
	ø 90 × 97 mm D-base
Weight	230 g S-base; 260 g D-base
Housing colour	Red or white
Lens colour	Red, yellow, green, blue, clear
Scope of delivery	1× operating instructions

2 YEAR WARRANTY

LIGHT & SOUND | COMPRO ST 40, ST 70 | Signal column

The ST 40 and ST 70 LED signal columns have been developed for industrial applications and are used to draw attention to an operating status. The signal columns are versatile and can be used as a signal column with one or more elements. You can choose between a steady or flashing light, and other variations are also possible on request.

How you benefit:
- Flexible application options
- Various combination options
- Impact-resistant housing IP65

- Use of an ascending siren (optional)
- LED signal column
- Extremely easy assembly
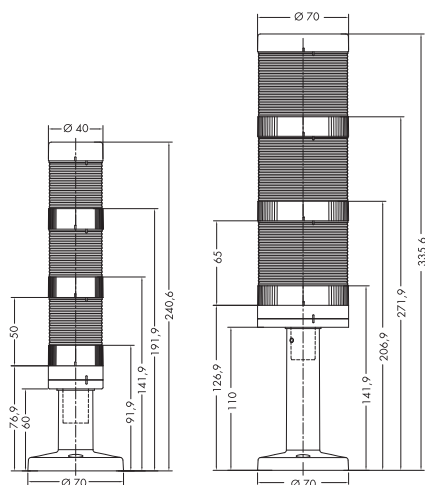
SPECIFICATIONS

Technical data	CO ST 40	CO ST 70
Voltage range	24 V AC/DC	24 V AC/DC
Settings	Steady light	Steady light, flashing light
Siren settings	Steady tone / pulse tone	Steady tone / pulse tone
Volume	75 dB(A)	75 dB(A)
Protection class	Lighting element: IP65	Lighting element: IP65
	Acoustic module: IP20	Acoustic module: IP20
Operating temperature	-25 °C to +70 °C	-25 °C to +70 °C
Dimensions	ø 40 × 141.9 mm 1 element	ø 70 × 206.9 mm 1 element
	ø 40 × 191.9 mm 2 elements	ø 70 × 271.9 mm 2 elements
	ø 40 × 240.6 mm 3 elements	ø 70 × 335.6 mm 3 elements
Weight	42 g 1 element	96 g 1 element
	84 g 2 elements	192 g 2 elements
	126 g 3 elements	288 g 3 elements
Housing colour	Black	Black
Siren colour	Black	Black
Lens colour	Red, yellow, green, blue, clear	Red, yellow, green, blue, clear
Housing Material	Housing: MPPO	Housing: MPPO
	Lens: PC	Lens: PC
Operating voltage	24 V AC/DC	24 V AC/DC
Scope of delivery	1× operating instructions	1× operating instructions

LIGHT & SOUND | COMPRO ST 40 4F, ST 70 4F | Signal column

The ST 40 4F and ST 70 4F multi-functional signal columns are an advancement of the previous standard signal column. 4 functions in a single product (steady light, flashing light, dual-flash or round ambient light) make this product a signalling device for individual use. The 4 functions can be pre-set during assembly using a jumper, making on-site installation easier.

How you benefit:

I 4 light functions selectable
I Large voltage range: 12 – 24 V AC/DC
I Flexible application options thanks to accessory components
I The colour selection and arrangement of the signal column can be customised with an LED element bayonet fitting.
I Compatible with the CO ST 40 or CO ST 70 elements **(steady and flashing light function)**

SPECIFICATIONS

Technical data	CO ST 40 4F	CO ST 70 4F
Signal	Steady light	Steady light
	Flashing beacon	Flashing beacon
	Dual-flash	Dual-flash
	Round ambient light	Round ambient light
Siren settings	Steady tone / pulse tone	Steady tone / pulse tone
Protection classes	Lighting element: IP65	Lighting element: IP65
	Acoustic module: IP20	Acoustic module: IP20
Operating temperature	-25 °C to +70 °C	-25 °C to +70 °C
Housing Material	Housing: MPPO	Housing: MPPO
	Lens: PC	Lens: PC
Operating voltage	12 V AC/DC or 24 V AC/DC	12 V AC/DC or 24 V AC/DC
Voltage range	12 – 24 V AC/DC	12 – 14 V AC/DC
Dimensions	ø 40 mm, height 50 mm (element)	ø 40 mm, height 50 mm (element)
Weight	42 g 1 element	96 g 1 element
	84 g 2 elements	192 g 2 elements
	126 g 3 elements	288 g 3 elements
Scope of delivery	1× operating instructions	1× operating instructions
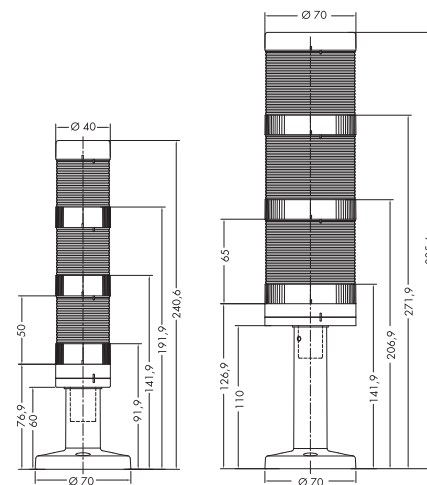
ENQUIRY / ORDER FORM

☐ Quotation request (please put an × by all the devices you are interested in)
☐ Order (please enter the number of devices in the box)
☐ Information (please put an × by all devices you are interested in)

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☐ Testboy 10
☐ Testboy 11
☐ Testboy 110
☐ Testboy 111
☐ Testboy 113
☐ Testboy 114
☐ Testboy 40 *Plus*
☐ Testboy Profi LED *Plus*
☐ Testboy Profi LCD *Plus*

Magnetic field testers:
☐ Testboy 15
☐ Testboy 130

Continuity testers:
☐ Testboy 20 *Plus*

Multimeters:
☐ Testboy 2200
☐ Testboy 312
☐ Testboy 313
☐ Testboy Pocket
☐ Testboy 3000

Current clamps:
☐ Testboy TV 216N
☐ Testboy TV 218

Socket outlet testers:
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☐ Testavit Schuki 2
☐ Testavit Schuki 2K
☐ Testavit Schuki 3

Car electronics:
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☐ Testboy 55
☐ Testboy 72
☐ Testboy 74
☐ Testboy 75
☐ Testboy Car Tester
☐ Testboy Light 500

Installation testers / adapters:
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☐ Testboy TV 416
☐ Testboy TV 432
☐ Testboy TV 416A
☐ Testboy TV 432A
☐ Testboy TV 410N
☐ Testboy TV 430N
☐ Testboy TV 440N
☐ Testboy TV 455
☐ Testboy TV 465
☐ Testboy TV 470

Thermometers, luxmeters, humidity testers or range finders
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☐ Testboy TV 325
☐ Testboy TV 332
☐ Testboy TV 600

Thermography:
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☐ Testboy TV 290 Control
☐ Testboy TV 303
☐ Testboy TV 308
☐ Testboy TV 309
☐ Testboy TV 304
☐ Testboy TV 305
☐ Testboy TV 306
☐ Testboy TV 500 Fire Chief

Light & sound;
☐ PSW.90XXX
☐ Askari
☐ Flashni
☐ Squashni G3
☐ Roshni
☐ Symphoni
☐ Solex
☐ Symphoni Voice Plus
☐ Asserta 230 V
☐ Asserta 24 V
☐ Solista | Solista Maxi
☐ Compro BL50
☐ Compro BL70
☐ Compro BL90
☐ Chiasso / Chiasso Low Power
☐ Chiasso Razor
☐ Compro ST 40
☐ Compro ST 70
☐ Compro ST 40 4F
☐ Compro ST 70 4F

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